Line No	FERC Acct	(a) Description	(b) Per Book Year Ended December 31, 2019	(c) Per Book Year Ended December 31, 2020	(d) Increase (Decrease)	(e) Increase (Decrease)%
		Rio Grande Power Station				
36	500000	Operation Supervision & Engineering	734,991	842,574	$ 107,583	14 64% (P)
37	502000	Steam Expenses	1,441,691	1,440,964	$ (727)	-0 05%
38	505000	Electric Expenses	241,757	314,600	$ 72,843	30 13% (Q)
39	506000	Miscellaneous Steam Power Expenses	1,097,548	1,099,846	$ 2,298	0 21%
40	510000	Maintenance Supervision & Engineering	680,597	613,293	$ (67,304)	-9 89%
41	511000	Maintenance of Structures	281,825	216,917	$ (64,908)	-23 03%
42	512000	Maintenance of Boiler Plant	1,405,798	2,307,591	$ 901,793	64 15% (R)
43	513000	Maintenance of Electric Plant	2,154,875	1,634,670	$ (520,206)	-24 14%
44	514000	Maintenance of Miscellaneous Steam Plant	869,252	896,275	$ 27,023	3 11%
45	546000	Operation Supervision & Engineering	458,832	437,742	$ (21,090)	-4 60%
46	549000	Misc Other Power Generation Expenses	7,177	1,184	$ (5,993)	-83 51%
47	551000	Maintenance Supervision & Engineering	9,670	12,541	$ 2,871	29 69%
48	552000	Maintenance of Structures	24,487	1,823	$ (22,664)	-92 55%
49	553000	Maintenance of Generating & Electric Plant	1,180,908	1,031,917	$ (148,991)	-12 62%
50	554000	Maintenance of Miscellaneous Other Power	77,118	255,794	$ 178,676	231 69% (S)
		Total Rio Grande	10,666,527	11,107,731	441,204	4 14%
		Total Gas Fueled Power Generation	$ 46,028,721	$ 55,241,783	$ 9,213,062	20 02%

(P) Primarily due to increased straight time charged to 500000, due to additional personnel to support plant operations and maintenance activities

(Q) Primarily due to increased water usage and higher water rates from the El Paso Water Utilities Water rates are expected to continue to increase steadily in future years

(R) Primarily due to increased maintenance and outage related expenses Outage and maintenance expenses are expected to continue at or above this level Please see the direct testimony of El Paso Electric witness J Kyle Olson, Page 25, line 28-30, and page 26, lines 1-19, and EPE's response to CEP 6-2

(S) Primarily due to increased straight time charged to 554000, due to additional personnel to support plant operations and maintenance activities

Amounts may not add or tie to other schedules due to rounding

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-13:

Please provide the most recent economic studies supporting planned retirement dates for each EPE generating unit.

RESPONSE:

Please reference El Paso Electric's response to CEP 1-27 which provides the description of how retirement dates have been recently analyzed and established. As described in that response, the potential for retirement extensions of units Rio Grande 7, Newman 1, and Newman 2 were evaluated with the Strategist capacity expansion model which performs an economic and operational analysis to identify the most cost-effective resource portfolio. Strategist did not select the retirement extensions in either the 2018 Integrated Resource Plan or in the selection of resources in the 2017 Request for Proposals. The Burns and McDonnell studies provided as CEP 1-27 Attachments 3-5 provided cost estimates for life extensions utilized as the input for the Strategist modeling.

A summary of the retirement extension costs versus new generation is provided in CEP 6-13, Attachment 1 Voluminous, and CEP 6-13, Attachment 2-4.

Preparer: Omar Gallegos Title: Senior Director – Resource Planning Management

Sponsor: David C. Hawkins Title: Vice President – Strategy & Sustainability

VOLUMINOUS

CEP 6-13 Attachment 1 is a VOLUMINOUS attachment.

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	2018	2019	2020	Fiscal Yr End 4/30/2027	Fiscal Yr End 4/30/2028
Electric plant in service				178,379	178,379
Accumulated depreciation				-	(4,459)
Net plant	-	-	-	178,379	173,919
Accumulated deferred income taxes				(1,698)	(2,111)
Total rate base	-	-	-	176,681	171,808
Weighted cost of capital				7 7250%	7 7250%
Return on investment				13,649	13,272
Revenue Requirements					
Fuel					20,301
Operation and maintenance expenses					
Variable					740
Fixed					11,552
Insurance					178
Depreciation					4,459
Taxes Other than income taxes					
Payroll taxes					
Property taxes					1,855
Revenue taxes					
Income taxes					2,621
Return on investment	-	-	-		13,649
Total non-fuel cost of service	-	-	-	-	55,355
E3 use Revenue Requirement					34,314
E3 $/KW-Year					152
Net Present Value at After-tax cost of capital					$773,811
Income Taxes					
Return	-	-	-	13,649	13,272
Less Synchronized interest	-	-	-	4,810	5,256
Return on equity	-	-	-	8,839	8,017
Plus					
Permanent differences				0	283
Taxable component of return	-	-	-	8,839	8,300
Tax factor				0 296512382	0 296512382
Income Taxes	-	-	-	2,621	2,461

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	Fiscal Yr End 4/30/2029	Fiscal Yr End 4/30/2030	Fiscal Yr End 4/30/2031	Fiscal Yr End 4/30/2032	Fiscal Yr End 4/30/2033	Fiscal Yr End 4/30/2034
Electric plant in service	178,379	178,379	178,379	178,379	178,379	178,379
Accumulated depreciation	(8,919)	(13,378)	(17,838)	(22,297)	(26,757)	(31,216)
Net plant	169,460	165,000	160,541	156,081	151,622	147,162
Accumulated deferred income taxes	(3,792)	(5,274)	(6,574)	(7,705)	(8,679)	(9,509)
Total rate base	165,668	159,726	153,966	148,376	142,943	137,654
Weighted cost of capital	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%
Return on investment	12,798	12,339	11,894	11,462	11,042	10,634
Revenue Requirements						
Fuel	20,934	21,566	22,013	22,478	22,955	23,448
Operation and maintenance expenses						
Variable	754	767	781	795	809	823
Fixed	11,966	12,053	12,141	12,231	14,155	12,416
Insurance	178	178	178	178	178	178
Depreciation	4,459	4,459	4,459	4,459	4,459	4,459
Taxes Other than income taxes						
Payroll taxes						
Property taxes	1,809	1,762	1,716	1,670	1,623	1,577
Revenue taxes						
Income taxes	2,461	2,376	2,294	2,214	2,137	2,062
Return on investment	13,272	12,798	12,339	11,894	11,462	11,042
Total non-fuel cost of service	55,833	55,960	55,922	55,920	57,779	56,005
E3 use Revenue Requirement	34,146	33,627	33,128	32,647	34,015	31,734
E3 $/KW-Year	151	149	146	144	150	140
Net Present Value at After-tax cost of capital						
Income Taxes						
Return	12,798	12,339	11,894	11,462	11,042	10,634
Less Synchronized interest	5,068	4,886	4,710	4,539	4,373	4,211
Return on equity	7,730	7,453	7,184	6,923	6,670	6,423
Plus						
Permanent differences	283	283	283	283	283	283
Taxable component of return	8,013	7,736	7,467	7,206	6,953	6,706
Tax factor	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
Income Taxes	2,376	2,294	2,214	2,137	2,062	1,988

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	Fiscal Yr End 4/30/2035	Fiscal Yr End 4/30/2036	Fiscal Yr End 4/30/2037	Fiscal Yr End 4/30/2038	Fiscal Yr End 4/30/2039	Fiscal Yr End 4/30/2040
Electric plant in service	178,379	178,379	178,379	178,379	178,379	178,379
Accumulated depreciation	(35,676)	(40,135)	(44,595)	(49,054)	(53,514)	(57,973)
Net plant	142,703	138,243	133,784	129,324	124,865	120,406
Accumulated deferred income taxes	(10,204)	(10,878)	(11,552)	(12,226)	(12,899)	(13,573)
Total rate base	132,499	127,365	122,232	117,099	111,966	106,833
Weighted cost of capital	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%
Return on investment	10,236	9,839	9,442	9,046	8,649	8,253
Revenue Requirements						
Fuel	23,951	24,462	24,983	25,517	26,063	26,621
Operation and maintenance expenses						
Variable	838	853	869	885	902	918
Fixed	12,511	12,611	12,713	18,342	12,924	13,032
Insurance	178	178	178	178	178	178
Depreciation	4,459	4,459	4,459	4,459	4,459	4,459
Taxes Other than income taxes						
Payroll taxes						
Property taxes	1,530	1,484	1,438	1,391	1,345	1,299
Revenue taxes						
Income taxes	1,988	1,917	1,846	1,775	1,704	1,633
Return on investment	10,634	10,236	9,839	9,442	9,046	8,649
Total non-fuel cost of service	56,090	56,200	56,326	61,991	56,621	56,790
E3 use Revenue Requirement	31,301	30,886	30,474	35,589	29,656	29,251
E3 $/KW-Year	138	136	135	157	131	129
Net Present Value at After-tax cost of capital						
Income Taxes						
Return	10,236	9,839	9,442	9,046	8,649	8,253
Less Synchronized interest	4,053	3,896	3,739	3,582	3,425	3,268
Return on equity	6,182	5,943	5,703	5,464	5,224	4,985
Plus						
Permanent differences	283	283	283	283	283	283
Taxable component of return	6,465	6,226	5,986	5,747	5,507	5,268
Tax factor	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
Income Taxes	1,917	1,846	1,775	1,704	1,633	1,562

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	Fiscal Yr End 4/30/2041	Fiscal Yr End 4/30/2042	Fiscal Yr End 4/30/2043	Fiscal Yr End 4/30/2044	Fiscal Yr End 4/30/2045	Fiscal Yr End 4/30/2046
Electric plant in service	178,379	178,379	178,379	178,379	178,379	178,379
Accumulated depreciation	(62,433)	(66,892)	(71,351)	(75,811)	(80,270)	(84,730)
Net plant	115,946	111,487	107,027	102,568	98,108	93,649
Accumulated deferred income taxes	(14,246)	(14,920)	(15,594)	(16,268)	(16,941)	(17,615)
Total rate base	101,700	96,566	91,433	86,300	81,167	76,034
Weighted cost of capital	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%
Return on investment	7,856	7,460	7,063	6,667	6,270	5,874
Revenue Requirements						
Fuel	27,190	27,772	28,367	28,974	29,594	30,227
Operation and maintenance expenses						
Variable	935	953	971	989	1,007	1,026
Fixed	13,142	13,254	15,568	13,485	13,603	13,724
Insurance	178	178	178	178	178	178
Depreciation	4,459	4,459	4,459	4,459	4,459	4,459
Taxes Other than income taxes						
Payroll taxes						
Property taxes	1,252	1,206	1,159	1,113	1,067	1,020
Revenue taxes						
Income taxes	1,562	1,491	1,420	1,349	1,278	1,207
Return on investment	8,253	7,856	7,460	7,063	6,667	6,270
Total non-fuel cost of service	56,973	57,170	59,582	57,610	57,853	58,112
E3 use Revenue Requirement	28,847	28,445	30,245	27,648	27,252	26,859
E3 $/KW-Year	127	126	134	122	120	119
Net Present Value at After-tax cost of capital						
Income Taxes						
Return	7,856	7,460	7,063	6,667	6,270	5,874
Less Synchronized interest	3,111	2,954	2,797	2,640	2,483	2,326
Return on equity	4,745	4,506	4,266	4,027	3,787	3,548
Plus						
Permanent differences	283	283	283	283	283	283
Taxable component of return	5,028	4,789	4,549	4,310	4,070	3,831
Tax factor	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
Income Taxes	1,491	1,420	1,349	1,278	1,207	1,136

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	Fiscal Yr End 4/30/2047	Fiscal Yr End 4/30/2048	Fiscal Yr End 4/30/2049	Fiscal Yr End 4/30/2050	Fiscal Yr End 4/30/2051	Fiscal Yr End 4/30/2052
Electric plant in service	178,379	178,379	178,379	178,379	178,379	178,379
Accumulated depreciation	(89,189)	(93,649)	(98,108)	(102,568)	(107,027)	(111,487)
Net plant	89,189	84,730	80,270	75,811	71,351	66,892
Accumulated deferred income taxes	(18,288)	(18,148)	(17,193)	(16,237)	(15,282)	(14,327)
Total rate base	70,901	66,582	63,078	59,573	56,069	52,565
Weighted cost of capital	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%
Return on investment	5,477	5,143	4,873	4,602	4,331	4,061
Revenue Requirements						
Fuel	30,874	31,534	32,209	32,899	33,603	34,322
Operation and maintenance expenses						
Variable	1,045	1,064	1,084	1,104	1,124	1,145
Fixed	13,847	19,984	14,100	14,230	14,362	14,497
Insurance	178	178	178	178	178	178
Depreciation	4,459	4,459	4,459	4,459	4,459	4,459
Taxes Other than income taxes						
Payroll taxes						
Property taxes	974	928	881	835	788	742
Revenue taxes						
Income taxes	1,136	1,065	1,005	957	908	860
Return on investment	5,874	5,477	5,143	4,873	4,602	4,331
Total non-fuel cost of service	58,387	64,690	59,060	59,534	60,025	60,535
E3 use Revenue Requirement	26,468	32,091	25,767	25,532	25,299	25,068
E3 $/KW-Year	117	142	114	113	112	111
Net Present Value at After-tax cost of capital						
Income Taxes						
Return	5,477	5,143	4,873	4,602	4,331	4,061
Less Synchronized interest	2,169	2,037	1,930	1,822	1,715	1,608
Return on equity	3,308	3,107	2,943	2,780	2,616	2,453
Plus						
Permanent differences	283	283	283	283	283	283
Taxable component of return	3,591	3,390	3,226	3,063	2,899	2,736
Tax factor	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
Income Taxes	1,065	1,005	957	908	860	811

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	Fiscal Yr End 4/30/2053	Fiscal Yr End 4/30/2054	Fiscal Yr End 4/30/2055	Fiscal Yr End 4/30/2056	Fiscal Yr End 4/30/2057	Fiscal Yr End 4/30/2058
Electric plant in service	178,379	178,379	178,379	178,379	178,379	178,379
Accumulated depreciation	(115,946)	(120,406)	(124,865)	(129,324)	(133,784)	(138,243)
Net plant	62,433	57,973	53,514	49,054	44,595	40,135
Accumulated deferred income taxes	(13,372)	(12,417)	(11,462)	(10,507)	(9,551)	(8,596)
Total rate base	49,060	45,556	42,052	38,548	35,043	31,539
Weighted cost of capital	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%
Return on investment	3,790	3,519	3,249	2,978	2,707	2,436
Revenue Requirements						
Fuel	35,056	35,806	36,573	37,355	38,155	38,971
Operation and maintenance expenses						
Variable	1,166	1,188	1,210	1,233	1,255	1,279
Fixed	17,277	14,774	14,916	15,062	15,209	21,863
Insurance	178	178	178	178	178	178
Depreciation	4,459	4,459	4,459	4,459	4,459	4,459
Taxes Other than income taxes						
Payroll taxes						
Property taxes	696	649	603	557	510	464
Revenue taxes						
Income taxes	811	763	714	666	617	569
Return on investment	4,061	3,790	3,519	3,249	2,978	2,707
Total non-fuel cost of service	63,705	61,608	62,173	62,758	63,362	70,491
E3 use Revenue Requirement	27,483	24,614	24,391	24,170	23,952	30,241
E3 $/KW-Year	121	109	108	107	106	134
Net Present Value at After-tax cost of capital						
Income Taxes						
Return	3,790	3,519	3,249	2,978	2,707	2,436
Less Synchronized interest	1,501	1,394	1,286	1,179	1,072	965
Return on equity	2,289	2,126	1,962	1,799	1,635	1,472
Plus						
Permanent differences	283	283	283	283	283	283
Taxable component of return	2,572	2,409	2,245	2,082	1,918	1,755
Tax factor	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
Income Taxes	763	714	666	617	569	520

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	Fiscal Yr End 4/30/2059	Fiscal Yr End 4/30/2060	Fiscal Yr End 4/30/2061	Fiscal Yr End 4/30/2062	Fiscal Yr End 4/30/2063	Fiscal Yr End 4/30/2064
Electric plant in service	178,379	178,379	178,379	178,379	178,379	178,379
Accumulated depreciation	(142,703)	(147,162)	(151,622)	(156,081)	(160,541)	(165,000)
Net plant	35,676	31,216	26,757	22,297	17,838	13,378
Accumulated deferred income taxes	(7,641)	(6,686)	(5,731)	(4,776)	(3,821)	(2,865)
Total rate base	28,035	24,530	21,026	17,522	14,017	10,513
Weighted cost of capital	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%
Return on investment	2,166	1,895	1,624	1,354	1,083	812
Revenue Requirements						
Fuel	39,805	40,657	41,527	42,416	43,323	44,251
Operation and maintenance expenses						
Variable	1,302	1,327	1,351	1,376	1,402	1,428
Fixed	15,513	15,669	15,828	15,990	19,332	16,324
Insurance	178	178	178	178	178	178
Depreciation	4,459	4,459	4,459	4,459	4,459	4,459
Taxes Other than income taxes						
Payroll taxes						
Property taxes	417	371	325	278	232	186
Revenue taxes						
Income taxes	520	472	423	375	326	278
Return on investment	2,436	2,166	1,895	1,624	1,354	1,083
Total non-fuel cost of service	64,633	65,299	65,987	66,698	70,607	68,186
E3 use Revenue Requirement	23,525	23,316	23,109	22,906	25,882	22,508
E3 $/KW-Year	104	103	102	101	114	99
Net Present Value at After-tax cost of capital						
Income Taxes						
Return	2,166	1,895	1,624	1,354	1,083	812
Less Synchronized interest	858	750	643	536	429	322
Return on equity	1,308	1,145	981	818	654	491
Plus						
Permanent differences	283	283	283	283	283	283
Taxable component of return	1,591	1,428	1,264	1,101	937	774
Tax factor	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
Income Taxes	472	423	375	326	278	229

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	Fiscal Yr End 4/30/2065	Fiscal Yr End 4/30/2066	Fiscal Yr End 4/30/2067
Electric plant in service	178,379	178,379	178,379
Accumulated depreciation	(169,460)	(173,919)	(178,379)
Net plant	8,919	4,459	-
Accumulated deferred income taxes	(1,910)	(955)	(0)
Total rate base	7,009	3,504	(0)
Weighted cost of capital	7 7250%	7 7250%	7 7250%
Return on investment	541	271	(0)
Revenue Requirements			
Fuel	45,198	46,165	47,153
Operation and maintenance expenses			
Variable	1,454	1,481	1,509
Fixed	16,495	16,669	16,847
Insurance	178	178	178
Depreciation	4,459	4,459	4,459
Taxes Other than income taxes			
Payroll taxes			
Property taxes	139	93	46
Revenue taxes			
Income taxes	229	181	132
Return on investment	812	541	271
Total non-fuel cost of service	68,965	69,768	70,595
E3 use Revenue Requirement	22,313	22,122	21,934
E3 $/KW-Year	99	98	97
Net Present Value at After-tax cost of capital			
Income Taxes			
Return	541	271	(0)
Less Synchronized interest	214	107	(0)
Return on equity	327	164	(0)
Plus			
Permanent differences	283	283	283
Taxable component of return	610	447	283
Tax factor	0 296512382	0 296512382	0 296512382
Income Taxes	181	132	84

El Paso Electric Company
Newman 6 - Simple Cycle Revenue Requirements
(thousands)

Summary Results

Present Value of Revenue Requirements as of May 1, 2022	$704,798,143
Levelized Cost of Energy $/MWh	$76 38

							1	2	3	4
								226 40 MW Simple Cycle		
				Generation (MWh) based on			COD May 1, 2022	35% Capacity Factor		
Mitsubishi GAC		Year	2018	2019	2020	2021	Fiscal Year End 4/29/2019	Fiscal Year End 4/29/2020	Fiscal Year End 4/29/2021	Fiscal Year End 4/29/2022
		MWh			0	0	694 142	694 142	694 142	694 142
$/MWh										
0 89		Proposed VOM Rate ($/MWh)				---	---	---	---	---
		1 827	1 827	1 827	1 827	1 827	1 781	1 781	1 781	1 781
		1 0183	**1 0183**	**1 0183**	**1 0183**	**1 0183**	**1 0178**	**1 0178**	**1 0178**	**1 0178**
			0 91	0 92	0 94	0 96	0 97	0 99	1 01	1 03
		VOM Costs ($)	0	0	0	0	676 315	688 361	700 622	713 101
		VOM Costs (000$)	0	0	0	0	676	688	701	713
$/KW-yr										
16 42		Proposed FOM ($/kW-yr)	16 72	17 03	17 34	17 65	17 98	18 30	18 62	18 95
		FOM ($)					4 069 679	4 142 165	4 215 943	4 291 034
		FOM (000$)			0	0	4 070	4 142	4 216	4 291
		Aurora FOM $/MW-Week					645	351	857	364
	1 400 000	Hot Gas Path Inspection 5-Year								
	2 500 000	Major Gas Turbine Inspection 10 year								
	75 000	Boroscope Annual						83 568	85 056	86 571
	200 000	Preventive Maintenance Annual						222 848	226 817	230 857
		Total Outage Costs	0	0	0	0	0	306	312	317
		Guaranteed Heat Rate					**9 668**	**9 668**	**9 668**	**9 668**
		Forecasted NewInter Prices (#515)	**2 55**	**2 41**	**2 43**	**2 50**	**2 57**	**2 64**	**2 72**	**2 81**
		Starup Fuel (2 08MMBTU/MW/Start 200 starts)					242 466	248 242	255 802	264 251
		Fuel Costs ($)			0	0	17 276 889	17 688 456	18 227 188	18 829 205
		Fuel Costs (000$)			0	0	17 519	17 937	18 483	19 093
EPNG Reservation Rate ($/Dth-day)		EPNG Reservation Needed (MMBTU/day)			0	0	52 532	52 532	52 532	52 532
		EPNG Reservation Cost ($)			0	0	7 096 370	7 096 370	7 096 370	7 096 370
$0 37		EPNG Reservation Cost ($000)			0	0	7 096	7 096	7 096	7 096
	$141,240						7 096	7 403	7 408	7 414

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 1 of 17

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Start Cost (assumes 200 starts/year @2.08 MMBTU/MW/Start
Spoke to Omar (12/1918) and decided to use the start-up fuel cost of NRG's $214k instead of the
$242 from above assumptions (Yasser calcs) and we are still conservative since GT6 is 226.4 MW and NR

	242	248	256	264
	7,339	7,651	7,664	7,678
NRG Startup Fuel Cost ($K)	214.71	219.82	226.52	234.00
Strategist Total FOM (K$)	7,311.08	7,622.61	7,634.76	7,647.80
	214,707	219,822	226,517	233,998

PRESENT VALUE OF REVENUE REQUIREMENTS MODEL		2018	2019	2020	2021	1 2022	2 2023	3 2024	4 2025
Project Name	EPE Newman-6 Simple Cycle With SCR. Project Stand alone. No $5.4M CC Provision , no $5M dual fuel								
Turbine	Mitsubishi GAC								
Proposal Type	Self Build								
Location	Newman								
Fuel	Dual Fuel								
Heat Rate	9.668								
Escalation Rate	2%	1.64%	18.49%	23.31%	53.11%	3.43%			
Total Investment (cash flow):	$141,840	2,329	26,232	33,070	75,338	4,871			
Life	40	years							
Book Depreciation	Straight-line								
Tax Depreciation (Gen. Equip)	20	years	MACRS						
Weighted cost of equity	4.666%								
Weighted cost of debt	3.059%								
Cost of Capital (Post-tax)	7.025%								
Return on Rate Base	7.725%								
Tax Rate	22.87%								
Capacity	226.40								
Insurance Rate	0.10%		123						
First Year Generation (MWh)	694,142								
Annual Degradation Rate	0.50%								
Prope	1.04%								

i. Minimum net unit output (MW) under normal operating conditions: 130 MW

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 2 of 17

$/KW	In combined-cycle mode: 130 MW	$627
Minim	In simple-cycle mode: 115.4 MW	123 MW

Revenue Requirement / PV Calculations	Fiscal Year End	4/29/2018	1 4/29/2019	2 4/29/2020	3 4/29/2021	4 4/29/2022
Revenue Requirements by year			49,844	50,259	50,348	50,519
Present Value of RR by year			46,572	43,877	41,070	38,505
Total Present Value			704,798			
Present Value of MWhs generated			9,227,309			
Aurora Inputs						
Demand Charge Related Revenue Requirement			18,640	18,289	17,782	17,292
$/MW week equivalent rate			$1,579.09	$1,549.33	$1,506.42	$1,464.89
Present Value of Demand Related Charges			$184,153			
Annualized Payment Demand Related Charges			$13,853.28			
Capital Carrying Cost ($/MW-WK)			$1,173.56			
Other Fixed Charges			13,008	13,345	13,382	13,421
Minus FOM			(4,070)	(4,142)	(4,216)	(4,291)
Net Other Fixed Charges			8,938	9,203	9,166	9,130
$/MW week equivalent rate			$757.19	$779.58	$776.49	$773.40
Present Value of Other Fixed Charges			$124,060			
Annualized Payment Other Fixed Charges			$9,332.68		IC $1.2 M	
Other Fixed Cost ($/MW-WK)			$790.60		1.28	

El Paso Electric Company
Newman-6 Simple Cycle
(thousands)

Total Company Rate Base	2018	2019	2020	Fiscal Yr End 4/29/2018	Fiscal Yr End 4/29/2019	Fiscal Yr End 4/29/2020	Fiscal Yr End 4/29/2021	Fiscal Yr End 4/29/2022
Electric plant in service				161,563	161,563	161,563	161,563	161,563
Accumulated depreciation				-	(4,039)	(8,078)	(12,117)	(16,156)
Net plant	-	-	-	161,563	157,524	153,485	149,446	145,407
Accumulated deferred income taxes				(1,538)	(1,912)	(3,434)	(4,777)	(5,955)
Total rate base	-	-	-	160,025	155,611	150,050	144,669	139,452
Weighted cost of capital				7.7250%	7.7250%	7.7250%	7.7250%	7.7250%
Return on investment				12,362	12,021	11,591	11,176	10,773
Revenue Requirements								
Fuel					17,519	17,937	18,483	19,093
Operation and maintenance expenses								
Variable					676	688	701	713
Fixed					11,166	11,545	11,624	11,705
Insurance					162	162	162	162
Depreciation					4,039	4,039	4,039	4,039
Taxes Other than income taxes								
Payroll taxes								
Property taxes					1,680	1,638	1,596	1,554
Revenue taxes								
Income taxes					2,239	2,229	2,152	2,078

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 3 of 17

Return on investment	-	-	-		12,362	12,021	11,591	11,176
Total non-fuel cost of service	-	-	-	-	49,844	50,259	50,348	50,519
E3 use Revenue Requirement					31,648	31,634	31,164	30,713
E3 $/KW-Year					140	140	138	136
Net Present Value at After-tax cost of capital					$704,798			

Income Taxes								
Return	-	-	-	12,362	12,021	11,591	11,176	10,773
Less Synchronized interest	-	-	-	4,810	4,760	4,590	4,425	4,266
Return on equity	-	-	-	7,552	7,261	7,001	6,750	6,507
Plus								
Permanent differences				0	256	256	256	256
Taxable component of return	-	-	-	7,552	7,517	7,258	7,007	6,763
Tax factor				0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
Income Taxes	-	-	-	2,239	2,229	2,152	2,078	2,005

Electric Plant in Service								
Beginning Balance	0	$2,421	$29,907	$66,922	$151,140	Cumulative		
Cash	$2,329	$26,232	$33,070	$75,338	$4,871	$141,840		
AFUDC	90	1,202	3,601	8,109	3,975	$16,977		
Insurance	2	26	33	75	5	$142		
Property taxes	-	25	311	696	1,572	$2,604		
Total	2,421	29,907	66,922	151,140	161,563	161,563		713 62

AFUDC						Cumulative		
CWIP Balance	1,166	15,563	46,614	104,976	51,455			
Debt	36	476	1,426	3,211	1,574	6,723		
Equity	54	726	2,175	4,898	2,401	10,255		
Total	90	1,202	3,601	8,109	3,975	16,977		

Depreciation Expense and Accumulated Depreciation								
Electric plant in service								
Newman- CT					161,563	161,563	161,563	161,563
Depreciation expense								
Newman- CT					4,039	4,039	4,039	4,039
Accumulated Depreciation								
Newman- CT					4,039	8,078	12,117	16,156
Deferred Income Taxes								
AFUDC - Debt				1,538	(38)	(38)	(38)	(38)
Liberalized depreciation				-	413	1,560	1,381	1,216
Deferred Income Taxes				1,538	375	1,522	1,343	1,177
Accumulated Deferred Income Taxes								
AFUDC - Debt				1,538	(38)	(77)	(115)	(154)
Liberalized depreciation				-	413	1,974	3,355	4,571
Accumulated Deferred Income Taxes				1,538	1,912	3,434	4,777	5,955
Tax Depreciation								
Depreciable balance					144,586	144,586	144,586	144,586
MACRS Depreciation Rate					3 7500%	7 2190%	6 6770%	6 1770%
Tax Depreciation					5,422	10,438	9,654	8,931
Book Depreciation					3,615	3,615	3,615	3,615
Difference					1,807	6,823	6,039	5,316
Tax rate					22 87%	22 87%	22 87%	22 87%
Deferred income taxes - Liberalized					413	1,560	1,381	1,216
ADIT					413	1,974	3,355	4,571
AFUDC - Debt				6,723				
Less AFUDC depreciation				-	168	168	168	168
Difference				6,723	(168)	(168)	(168)	(168)
Tax rate				22 87%	22 87%	22 87%	22 87%	22 87%
Deferred income taxes - AFUDC				1,538	(38)	(38)	(38)	(38)
ADIT - AFUDC				1,538	1,499	1,461	1,422	1,384
Additional Depreciation - AFUDC Equity								
AFUDC Equity - CT				10,255				
Total Additional Depreciation					256	256	256	256

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 4 of 17

5	6	7	8	9	10	11	12	13	14	15	16	17
Fiscal Year End 4/29/2023	**Fiscal Year End 4/29/2024**	**Fiscal Year End 4/29/2025**	**Fiscal Year End 4/29/2026**	**Fiscal Year End 4/29/2027**	**Fiscal Year End 4/29/2028**	**Fiscal Year End 4/29/2029**	**Fiscal Year End 4/29/2030**	**Fiscal Year End 4/29/2031**	**Fiscal Year End 4/29/2032**	**Fiscal Year End 4/29/2033**	**Fiscal Year End 4/29/2034**	**Fiscal Year End 4/29/2035**
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
---	---	---	---	---	---	---	---	---	---	---	---	---
1 781	1 781	1 781	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855
1 0178	**1 0178**	**1 0178**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**
1 05	1 06	1 08	1 10	1 12	1 14	1 16	1 19	1 21	1 23	1 25	1 28	1 30
725,802	738,729	751,887	765,279	779,478	793,940	808,670	823,674	838,956	854,522	870,376	886,525	902,973
726	739	752	765	779	794	809	824	839	855	870	887	903
19 29	19 63	19 98	20 34	20 72	21 10	21 49	21 89	22 30	22 71	23 13	23 56	24 00
4,367,462	4,445,252	4,524,428	4,605,013	4,690,453	4,777,478	4,866,117	4,956,401	5,048,360	5,142,025	5,237,428	5,334,601	5,433,577
4,367	4,445	4,524	4,605	4,690	4,777	4,866	4,956	5,048	5,142	5,237	5,335	5,434
370	377	383	390	397	405	412	420	428	436	444	452	460
	1,674,075					1,832,572					2,009,002	
						3,213,741						
88,113	89,683	91,280	92,906	94,629	96,385	98,173	99,995	101,850	103,740	105,665	107,625	109,622
234,968	239,154	243,413	247,749	252,345	257,027	261,796	266,653	271,601	276,640	281,772	287,000	292,325
323	2,003	335	341	347	353	5,406	367	373	380	387	2,404	402
9 668	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**
2 90	**2 98**	**3 08**	**3 17**	**3 23**	**3 30**	**3 37**	**3 45**	**3 52**	**3 59**	**3 67**	**3 75**	**3 83**
273,589	280,964	289,718	298,473	304,660	311,099	317,693	324,513	331,478	338,545	345,762	353,149	360,707
19,494,607	20,020,091	20,643,829	21,267,734	21,708,542	22,167,361	22,637,210	23,123,156	23,619,454	24,123,048	24,637,264	25,163,674	25,702,177
19,768	20,301	20,934	21,566	22,013	22,478	22,955	23,448	23,951	24,462	24,983	25,517	26,063
52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532
7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370
7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096
7,419	9,099	7,431	7,437	7,443	7,450	12,503	7,463	7,470	7,477	7,484	9,500	7,498

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 5 of 17

274	281	290	298	305	311	318	325	331	339	346	353	361
7,693	9,380	7,721	7,735	7,748	7,761	12,820	7,788	7,801	7,815	7,830	9,853	7,859
242.27	**248.80**	**256.55**	**264.30**	**269.78**	**275.48**	**281.32**	**287.36**	**293.53**	**299.79**	**306.18**	**312.72**	**319.41**
7,661.72	**9,348.08**	**7,687.61**	**7,701.33**	**7,713.13**	**7,725.27**	**12,783.97**	**7,750.38**	**7,763.35**	**7,776.54**	**7,789.98**	**9,812.72**	**7,817.73**
242,268	248,798	256,549	264,303	269,781	275,483	281,322	287,361	293,529	299,787	306,178	312,719	319,412

5	6	7	8	9	10	11	12	13	14	15	16	17
2026	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 6 of 17

5	6	7	8	9	10	11	12	13	14	15	16	17
4/29/2023	4/29/2024	4/29/2025	4/29/2026	4/29/2027	4/29/2028	4/29/2029	4/29/2030	4/29/2031	4/29/2032	4/29/2033	4/29/2034	4/29/2035
50,772	52,572	51,138	51,393	51,478	51,586	56,753	51,846	51,998	52,159	52,334	54,531	52,726
36,157	34,982	31,794	29,855	27,942	26,163	26,894	22,956	21,512	20,162	18,902	18,403	16,625
16,817	16,356	15,908	15,471	15,046	14,623	14,199	13,776	13,352	12,929	12,505	12,082	11,658
$1,424.64	$1,385.57	$1,345.59	$1,310.63	$1,274.60	$1,238.73	$1,202.85	$1,166.98	$1,131.11	$1,095.23	$1,059.36	$1,023.48	$987.61
13,461	15,176	13,545	13,590	13,640	13,691	18,791	13,799	13,856	13,915	13,975	16,046	14,102
(4,367)	(4,445)	(4,524)	(4,605)	(4,690)	(4,777)	(4,866)	(4,956)	(5,048)	(5,142)	(5,237)	(5,335)	(5,434)
9,093	10,731	9,021	8,985	8,949	8,914	13,924	8,843	8,808	8,772	8,738	10,712	8,668
$770.32	$909.07	$764.19	$761.13	$758.11	$755.10	$1,179.59	$749.10	$746.12	$743.15	$740.19	$907.43	$734.30

Aurora $/MW-Week

$791.88

Fiscal Yr End 4/29/2023	Fiscal Yr End 4/29/2024	Fiscal Yr End 4/29/2025	Fiscal Yr End 4/29/2026	Fiscal Yr End 4/29/2027	Fiscal Yr End 4/29/2028	Fiscal Yr End 4/29/2029	Fiscal Yr End 4/29/2030	Fiscal Yr End 4/29/2031	Fiscal Yr End 4/29/2032	Fiscal Yr End 4/29/2033	Fiscal Yr End 4/29/2034	Fiscal Yr End 4/29/2035
161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563
(20,195)	(24,234)	(28,274)	(32,313)	(36,352)	(40,391)	(44,430)	(48,469)	(52,508)	(56,547)	(60,586)	(64,625)	(68,664)
141,368	137,329	133,289	129,250	125,211	121,172	117,133	113,094	109,055	105,016	100,977	96,938	92,899
(6,979)	(7,861)	(8,612)	(9,242)	(9,853)	(10,463)	(11,073)	(11,683)	(12,293)	(12,903)	(13,514)	(14,124)	(14,734)
134,389	129,467	124,677	120,008	115,359	110,709	106,060	101,411	96,762	92,113	87,463	82,814	78,165
7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%
10,382	10,001	9,631	9,271	8,911	8,552	8,193	7,834	7,475	7,116	6,757	6,397	6,038
19,768	20,301	20,934	21,566	22,013	22,478	22,955	23,448	23,951	24,462	24,983	25,517	26,063
726	739	752	765	779	794	809	824	839	855	870	887	903
11,787	13,545	11,955	12,042	12,134	12,227	17,369	12,419	12,518	12,619	12,721	14,835	12,932
162	162	162	162	162	162	162	162	162	162	162	162	162
4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039
1,512	1,470	1,428	1,386	1,344	1,302	1,260	1,218	1,176	1,134	1,092	1,050	1,008
2,005	1,935	1,867	1,801	1,736	1,672	1,608	1,543	1,479	1,415	1,350	1,286	1,222

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 7 of 17

10,773	10,382	10,001	9,631	9,271	8,911	8,552	8,193	7,834	7,475	7,116	6,757	6,397
50,772	52,572	51,138	51,393	51,478	51,586	56,753	51,846	51,998	52,159	52,334	54,531	52,726
30,278	31,532	29,453	29,061	28,686	28,314	32,990	27,575	27,208	26,843	26,480	28,128	25,760
134	139	130	128	127	125	146	122	120	119	117	124	114
10,382	10,001	9,631	9,271	8,911	8,552	8,193	7,834	7,475	7,116	6,757	6,397	6,038
4,111	3,960	3,814	3,671	3,529	3,387	3,244	3,102	2,960	2,818	2,675	2,533	2,391
6,271	6,041	5,817	5,600	5,383	5,166	4,949	4,732	4,515	4,298	4,081	3,864	3,647
256	256	256	256	256	256	256	256	256	256	256	256	256
6,527	6,297	6,074	5,856	5,639	5,422	5,205	4,988	4,771	4,554	4,337	4,120	3,904
0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
1,935	1,867	1,801	1,736	1,672	1,608	1,543	1,479	1,415	1,350	1,286	1,222	1,157
161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563
4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039
20,195	24,234	28,274	32,313	36,352	40,391	44,430	48,469	52,508	56,547	60,586	64,625	68,664
(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)
1,062	921	790	669	649	648	649	648	649	648	649	648	649
1,024	882	751	630	610	610	610	610	610	610	610	610	610
(192)	(231)	(269)	(308)	(346)	(384)	(423)	(461)	(500)	(538)	(577)	(615)	(653)
5,633	6,554	7,344	8,012	8,661	9,310	9,958	10,607	11,256	11,904	12,553	13,201	13,850
6,979	7,861	8,612	9,242	9,853	10,463	11,073	11,683	12,293	12,903	13,514	14,124	14,734
144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586
5 7130%	5 2850%	4 8880%	4 5220%	4 4620%	4 4610%	4 4620%	4 4610%	4 4620%	4 4610%	4 4620%	4 4610%	4 4620%
8,260	7,641	7,067	6,538	6,451	6,450	6,451	6,450	6,451	6,450	6,451	6,450	6,451
3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615
4,646	4,027	3,453	2,924	2,837	2,835	2,837	2,835	2,837	2,835	2,837	2,835	2,837
22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%
1,062	921	790	669	649	648	649	648	649	648	649	648	649
5,633	6,554	7,344	8,012	8,661	9,310	9,958	10,607	11,256	11,904	12,553	13,201	13,850
168	168	168	168	168	168	168	168	168	168	168	168	168
(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)
22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%
(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)
1,345	1,307	1,268	1,230	1,192	1,153	1,115	1,076	1,038	999	961	923	884
256	256	256	256	256	256	256	256	256	256	256	256	256

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 8 of 17

18	19	20	21	22	23	24	25	26	27	28	29	30
Fiscal Year End 4/29/2036	Fiscal Year End 4/29/2037	Fiscal Year End 4/29/2038	Fiscal Year End 4/29/2039	Fiscal Year End 4/29/2040	Fiscal Year End 4/29/2041	Fiscal Year End 4/29/2042	Fiscal Year End 4/29/2043	Fiscal Year End 4/29/2044	Fiscal Year End 4/29/2045	Fiscal Year End 4/29/2046	Fiscal Year End 4/29/2047	Fiscal Year End 4/29/2048
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
---	---	---	---	---	---	---	---	---	---	---	---	---
1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855
1 0186	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**
1 32	1 35	1 37	1 40	1 43	1 45	1 48	1 51	1 53	1 56	1 59	1 62	1 65
919,727	936,791	954,172	971,875	989,907	1,008,273	1,026,980	1,046,034	1,065,442	1,085,210	1,105,344	1,125,852	1,146,741
920	937	954	972	990	1,008	1,027	1,046	1,065	1,085	1,105	1,126	1,147
24 45	24 90	25 36	25 83	26 31	26 80	27 30	27 80	28 32	28 84	29 38	29 92	30 48
5,534,389	5,637,072	5,741,660	5,848,188	5,956,693	6,067,211	6,179,780	6,294,437	6,411,221	6,530,172	6,651,331	6,774,737	6,900,432
5,534	5,637	5,742	5,848	5,957	6,067	6,180	6,294	6,411	6,530	6,651	6,775	6,900
469	478	486	495	505	514	524	533	543	553	563	574	585
			2,202,418					2,414,456				
			3,289,008									
111,656	113,727	115,837	117,987	120,176	122,405	124,677	126,990	129,346	131,746	134,190	136,680	139,216
297,749	303,273	308,900	314,631	320,469	326,415	332,471	338,639	344,922	351,322	357,840	364,479	371,242
409	417	425	5,924	441	449	457	466	2,889	483	492	501	510
9 668	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**
3 91	**4 00**	**4 08**	**4 17**	**4 26**	**4 35**	**4 44**	**4 54**	**4 63**	**4 73**	**4 83**	**4 94**	**5 04**
368,426	376,310	384,363	392,589	400,990	409,571	418,336	427,289	436,433	445,772	455,312	465,055	475,008
26,252,203	26,814,000	27,387,820	27,973,919	28,572,561	29,184,014	29,808,552	30,446,455	31,098,009	31,763,506	32,443,245	33,137,531	33,846,674
26,621	27,190	27,772	28,367	28,974	29,594	30,227	30,874	31,534	32,209	32,899	33,603	34,322
52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532
7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370
7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096
7,506	7,513	7,521	13,020	7,537	7,545	7,554	7,562	9,985	7,579	7,588	7,598	7,607

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 9 of 17

368	376	384	393	401	410	418	427	436	446	455	465	475
7,874	7,890	7,905	13,413	7,938	7,955	7,972	7,989	10,422	8,025	8,044	8,063	8,082
326.25	333.23	340.36	347.64	355.08	362.68	370.44	378.37	0.00	0.00	0.00	0.00	0.00
7,832.02	7,846.60	7,861.47	13,368.06	7,892.10	7,907.87	7,923.96	7,940.37	9,985.09	7,579.44	7,588.40	7,597.53	7,606.83
326,247	333,229	340,360	347,644	355,083	362,682	370,443	378,371					

18	19	20	21	22	23	24	25	26	27	28	29	30
2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 10 of 17

18	19	20	21	22	23	24	25	26	27	28	29	30
4/29/2036	4/29/2037	4/29/2038	4/29/2039	4/29/2040	4/29/2041	4/29/2042	4/29/2043	4/29/2044	4/29/2045	4/29/2046	4/29/2047	4/29/2048
52,943	53,175	53,421	59,173	54,025	54,451	54,893	55,351	58,239	56,316	56,825	57,351	57,895
15,598	14,638	13,741	14,221	12,132	11,425	10,761	10,139	9,968	9,006	8,491	8,007	7,552
11,235	10,811	10,388	9,964	9,608	9,319	9,030	8,741	8,452	8,163	7,873	7,584	7,295
$951 73	$915.86	$879 99	$844.11	$813.93	$789.44	$764.95	$740.46	$715.97	$691.48	$666.98	$642.49	$618 00
14,168	14,236	14,306	19,870	14,453	14,530	14,609	14,690	17,188	14,859	14,947	15,038	15,131
(5,534)	(5,637)	(5,742)	(5,848)	(5,957)	(6,067)	(6,180)	(6,294)	(6,411)	(6,530)	(6,651)	(6,775)	(6,900)
8,633	8,599	8,565	14,022	8,497	8,463	8,429	8,396	10,777	8,329	8,296	8,263	8,230
$731 37	$728 46	$725 55	$1,187.86	$719 78	$716 92	$714 07	$711 23	$913 94	$705.59	$702.79	$700 00	$697.23

Fiscal Yr End 4/29/2036	Fiscal Yr End 4/29/2037	Fiscal Yr End 4/29/2038	Fiscal Yr End 4/29/2039	Fiscal Yr End 4/29/2040	Fiscal Yr End 4/29/2041	Fiscal Yr End 4/29/2042	Fiscal Yr End 4/29/2043	Fiscal Yr End 4/29/2044	Fiscal Yr End 4/29/2045	Fiscal Yr End 4/29/2046	Fiscal Yr End 4/29/2047	Fiscal Yr End 4/29/2048
161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563
(72,703)	(76,742)	(80,781)	(84,821)	(88,860)	(92,899)	(96,938)	(100,977)	(105,016)	(109,055)	(113,094)	(117,133)	(121,172)
88,860	84,821	80,781	76,742	72,703	68,664	64,625	60,586	56,547	52,508	48,469	44,430	40,391
(15,344)	(15,954)	(16,564)	(16,437)	(15,572)	(14,707)	(13,842)	(12,977)	(12,111)	(11,246)	(10,381)	(9,516)	(8,651)
73,516	68,866	64,217	60,305	57,131	53,957	50,784	47,610	44,436	41,262	38,088	34,914	31,740
7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%	7 7250%
5,679	5,320	4,961	4,659	4,413	4,168	3,923	3,678	3,433	3,187	2,942	2,697	2,452
26,621	27,190	27,772	28,367	28,974	29,594	30,227	30,874	31,534	32,209	32,899	33,603	34,322
920	937	954	972	990	1,008	1,027	1,046	1,065	1,085	1,105	1,126	1,147
13,040	13,150	13,263	18,869	13,494	13,612	13,733	13,856	16,396	14,110	14,240	14,372	14,507
162	162	162	162	162	162	162	162	162	162	162	162	162
4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039
966	924	882	840	798	756	714	672	630	588	546	504	462
1,157	1,093	1,029	964	910	866	823	779	735	691	647	603	559

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 11 of 17

6,038	5,679	5,320	4,961	4,659	4,413	4,168	3,923	3,678	3,433	3,187	2,942	2,697
52,943	53,175	53,421	59,173	54,025	54,451	54,893	55,351	58,239	56,316	56,825	57,351	57,895
25,403	25,047	24,694	29,835	24,061	23,849	23,639	23,431	25,640	23,022	22,821	22,622	22,426
112	111	109	132	106	105	104	103	113	102	101	100	99
5,679	5,320	4,961	4,659	4,413	4,168	3,923	3,678	3,433	3,187	2,942	2,697	2,452
2,249	2,107	1,964	1,845	1,748	1,651	1,553	1,456	1,359	1,262	1,165	1,068	971
3,430	3,213	2,996	2,814	2,666	2,518	2,370	2,221	2,073	1,925	1,777	1,629	1,481
256	256	256	256	256	256	256	256	256	256	256	256	256
3,687	3,470	3,253	3,070	2,922	2,774	2,626	2,478	2,330	2,182	2,034	1,885	1,737
0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382
1,093	1,029	964	910	866	823	779	735	691	647	603	559	515
161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563
4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039
72,703	76,742	80,781	84,821	88,860	92,899	96,938	100,977	105,016	109,055	113,094	117,133	121,172
(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)
648	649	648	(89)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)
610	610	610	(127)	(865)	(865)	(865)	(865)	(865)	(865)	(865)	(865)	(865)
(692)	(730)	(769)	(807)	(846)	(884)	(923)	(961)	(999)	(1,038)	(1,076)	(1,115)	(1,153)
14,498	15,147	15,796	15,707	14,880	14,053	13,227	12,400	11,573	10,747	9,920	9,093	8,267
15,344	15,954	16,564	16,437	15,572	14,707	13,842	12,977	12,111	11,246	10,381	9,516	8,651
144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586
4 4610%	4 4620%	4 4610%	2 2310%									
6,450	6,451	6,450	3,226	-	-	-	-	-	-	-	-	-
3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615
2,835	2,837	2,835	(389)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)
22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%
648	649	648	(89)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)
14,498	15,147	15,796	15,707	14,880	14,053	13,227	12,400	11,573	10,747	9,920	9,093	8,267
168	168	168	168	168	168	168	168	168	168	168	168	168
(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)
22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%
(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)
846	807	769	730	692	653	615	577	538	500	461	423	384
256	256	256	256	256	256	256	256	256	256	256	256	256

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 12 of 17

31	32	33	34	35	36	37	38	39	40	41	42	43
Fiscal Year End 4/29/2049	Fiscal Year End 4/29/2050	Fiscal Year End 4/29/2051	Fiscal Year End 4/29/2052	Fiscal Year End 4/29/2053	Fiscal Year End 4/29/2054	Fiscal Year End 4/29/2055	Fiscal Year End 4/29/2056	Fiscal Year End 4/29/2057	Fiscal Year End 4/29/2058	57830	57831	57832
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
---	---	---	---	---	---	---	---	---	---	---	---	---
1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855
1 0186	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**
1 68	1 71	1 75	1 78	1 81	1 84	1 88	1 91	1 95	1 99	2 02	2 06	2 10
1,168,017	1,189,688	1,211,761	1,234,243	1,257,143	1,280,468	1,304,225	1,328,423	1,353,070	1,378,174	1,403,744	1,429,789	1,456,316
1,168	1,190	1,212	1,234	1,257	1,280	1,304	1,328	1,353	1,378	1,404	1,430	1,456
31 04	31 62	32 21	32 80	33 41	34 03	34 66	35 31	35 96	36 63	37 31	38 00	38 71
7,028,460	7,158,863	7,291,686	7,426,973	7,564,770	7,705,123	7,848,081	7,993,691	8,142,002	8,293,066	8,446,932	8,603,653	8,763,281
7,028	7,159	7,292	7,427	7,565	7,705	7,848	7,994	8,142	8,293	8,447	8,604	8,763
595*	*606	618	629	641	*653	665	677	690	703	*716	729	742
2,646,907					2,901,737	0				3,181,101		
3,293,808										3,293,808		
141,799	144,429	147,109	149,839	152,619	155,450	158,334	161,272	164,264	167,312	170,416	173,578	176,798
378,130	385,145	392,291	399,569	406,983	414,534	422,225	430,059	438,038	446,165	454,443	462,875	471,463
6,461	530	539	549	560	3,472	581	591	602	613	7,100	636	648
9 668	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**
5 15	**5 26**	**5 37**	**5 49**	**5 61**	**5 73**	**5 85**	**5 97**	**6 10**	**6 23**	**6 37**	**6 50**	**6 64**
485,173	495,555	506,160	516,992	528,056	539,356	550,898	562,688	574,729	587,028	599,591	612,422	625,528
34,570,993	35,310,812	36,066,464	36,838,286	37,626,625	38,431,835	39,254,276	40,094,318	40,952,336	41,828,716	42,723,851	43,638,141	44,571,997
35,056	35,806	36,573	37,355	38,155	38,971	39,805	40,657	41,527	42,416	43,323	44,251	45,198
52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532
7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370
7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096
13,557	7,626	7,636	7,646	7,656	10,568	7,677	7,688	7,699	7,710			

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 13 of 17

485	496	506	517	528	539	551	563	575	587
14,042	8,122	8,142	8,163	8,184	11,107	8,228	8,250	8,273	8,297
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13,557.01	**7,625.94**	**7,635.77**	**7,645.78**	**7,655.97**	**10,568.09**	**7,676.93**	**7,687.70**	**7,698.67**	**7,709.85**

31	32	33	34	35	36	37	38	39	40
2052	**2053**	**2054**	**2055**	**2056**	**2057**	**2058**	**2059**	**2060**	**2061**

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 14 of 17

31	32	33	34	35	36	37	38	39	40
4/29/2049	4/29/2050	4/29/2051	4/29/2052	4/29/2053	4/29/2054	4/29/2055	4/29/2056	4/29/2057	4/29/2058
64,397	59,037	59,637	60,257	60,896	64,457	62,235	62,937	63,660	64,405
7,849	6,724	6,346	5,991	5,657	5,595	5,048	4,769	4,508	4,261
7,006	6,717	6,428	6,139	5,850	5,561	5,271	4,982	4,693	4,404
$593.51	$569.02	$544.53	$520.04	$495.55	$471.06	$446.57	$422.08	$397.59	$373.09
21,167	15,324	15,425	15,528	15,634	18,645	15,855	15,969	16,086	16,206
(7,028)	(7,159)	(7,292)	(7,427)	(7,565)	(7,705)	(7,848)	(7,994)	(8,142)	(8,293)
14,139	8,166	8,133	8,101	8,070	10,940	8,007	7,975	7,944	7,913
$1,197.73	$691.73	$689.01	$686.30	$683.60	$926.74	$678.26	$675.61	$672.98	$670.37

Fiscal Yr End 4/29/2049	Fiscal Yr End 4/29/2050	Fiscal Yr End 4/29/2051	Fiscal Yr End 4/29/2052	Fiscal Yr End 4/29/2053	Fiscal Yr End 4/29/2054	Fiscal Yr End 4/29/2055	Fiscal Yr End 4/29/2056	Fiscal Yr End 4/29/2057	Fiscal Yr End 4/29/2058
161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563
(125,211)	(129,250)	(133,289)	(137,329)	(141,368)	(145,407)	(149,446)	(153,485)	(157,524)	(161,563)
36,352	32,313	28,274	24,234	20,195	16,156	12,117	8,078	4,039	-
(7,786)	(6,921)	(6,056)	(5,191)	(4,326)	(3,460)	(2,595)	(1,730)	(865)	0
28,566	25,392	22,218	19,044	15,870	12,696	9,522	6,348	3,174	0
7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%	7.7250%
2,207	1,962	1,716	1,471	1,226	981	736	490	245	0
35,056	35,806	36,573	37,355	38,155	38,971	39,805	40,657	41,527	42,416
1,168	1,190	1,212	1,234	1,257	1,280	1,304	1,328	1,353	1,378
20,585	14,785	14,927	15,073	15,221	18,273	15,525	15,681	15,841	16,003
162	162	162	162	162	162	162	162	162	162
4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039
420	378	336	294	252	210	168	126	84	42
515	471	427	383	339	296	252	208	164	120

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 15 of 17

2,452	2,207	1,962	1,716	1,471	1,226	981	736	490	245	
64,397	59,037	59,637	60,257	60,896	64,457	62,235	62,937	63,660	64,405	
28,173	22,041	21,853	21,667	21,484	24,205	21,126	20,951	20,780	20,611	
124	97	97	96	95	107	93	93	92	91	
2,207	1,962	1,716	1,471	1,226	981	736	490	245	0	
874	777	680	583	485	388	291	194	97	0	
1,333	1,185	1,037	889	740	592	444	296	148	0	
256	256	256	256	256	256	256	256	256	256	
1,589	1,441	1,293	1,145	997	849	701	553	404	256	
0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	0 296512382	
471	427	383	339	296	252	208	164	120	76	
161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	161,563	
4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	4,039	161,563
125,211	129,250	133,289	137,329	141,368	145,407	149,446	153,485	157,524	161,563	
(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(0)
(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(0)
(865)	(865)	(865)	(865)	(865)	(865)	(865)	(865)	(865)	(865)	
(1,192)	(1,230)	(1,268)	(1,307)	(1,345)	(1,384)	(1,422)	(1,461)	(1,499)	(1,538)	
7,440	6,613	5,787	4,960	4,133	3,307	2,480	1,653	827	(0)	
7,786	6,921	6,056	5,191	4,326	3,460	2,595	1,730	865	(0)	
144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	144,586	
-	-	-	-	-	-	-	-	-	-	
3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	144,586
(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	(3,615)	
22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	
(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	(827)	
7,440	6,613	5,787	4,960	4,133	3,307	2,480	1,653	827	(0)	
168	168	168	168	168	168	168	168	168	168	6,723
(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	(168)	
22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	22 87%	
(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	
346	308	269	231	192	154	115	77	38	(0)	
256	256	256	256	256	256	256	256	256	256	10,255

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 16 of 17

44	45	46	47	48	49	50	51	52	53	54	55
57833	**57834**	**57835**	**57836**	**57837**	**57838**	**57839**	**57840**	**57841**	**57842**	**57843**	**57844**
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
---	---	---	---	---	---	---	---	---	---	---	---
1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855	1 855
1 0186	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**	**1 0186**
2 14	2 18	2 22	2 26	2 30	2 34	2 39	2 43	2 48	2 52	2 57	2 62
1,483,336	1,510,858	1,538,889	1,567,441	1,596,523	1,626,144	1,656,315	1,687,046	1,718,346	1,750,228	1,782,701	1,815,776
1,483	1,511	1,539	1,567	1,597	1,626	1,656	1,687	1,718	1,750	1,783	1,816
39 43	40 16	40 90	41 66	42 43	43 22	44 02	44 84	45 67	46 52	47 38	48 26
8,925,872	9,091,478	9,260,158	9,431,967	9,606,964	9,785,208	9,966,758	10,151,677	10,340,027	10,531,872	10,727,276	10,926,305
8,926	9,091	9,260	9,432	9,607	9,785	9,967	10,152	10,340	10,532	10,727	10,926
756	770	784	799	814	829	844	860	876	892	909	926
		3,487,361					3,823,105				
							3,293,808				
180,079	183,420	186,823	190,289	193,820	197,416	201,078	204,809	208,609	212,480	216,422	220,437
480,210	489,119	498,194	507,438	516,852	526,442	536,209	546,158	556,291	566,612	577,125	587,833
660	673	4,172	698	711	724	737	7,868	765	779	794	808
9 668	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**	**9 668**
6 78	**6 93**	**7 08**	**7 23**	**7 38**	**7 54**	**7 70**	**7 87**	**8 04**	**8 21**	**8 38**	**8 56**
638,914	652,587	666,552	680,816	695,386	710,267	725,467	740,992	756,849	773,046	789,589	806,486
45,525,838	46,500,091	47,495,193	48,511,590	49,549,738	50,610,102	51,693,159	52,799,392	53,929,299	55,083,386	56,262,171	57,466,181
46,165	47,153	48,162	49,192	50,245	51,320	52,419	53,540	54,686	55,856	57,052	58,273
52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532	52,532
7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370	7,096,370
7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096	7,096

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-13
Attachment 3
Page 17 of 17

El Paso Electric Company Table OG-2-R
Comparison of Revenue Requirements
Workpaper OG-4-R

Year		1	2	3	4	5	6	7
Unit	**Capacity**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Life Extension with Gas Turbine (000)								
Newman 1	76	$ 24,007	$ 17,143	$ 18,246	$ 16,973	$ 16,849		
Newman 2	76	$ 27,063	$ 18,890	$ 20,265	$ 18,464	$ 18,212		
Rio 7	48	$ 21,280	$ 17,558	$ 14,479	$ 14,216	$ 13,921		
Gas Turbine		$ -	$ -	$ -	$ -	$ -	$ 55,355	$ 55,833
Total	200	$ 72,350	$ 53,591	$ 52,990	$ 49,653	$ 48,981	$ 55,355	$ 55,833
Newman 6								
Newman 6	228	$ 49,844	$ 50,259	$ 50,348	$ 50,519	$ 50,772	$ 52,572	$ 51,138
Annual Present Value -2022 (000)								
Life extension with gas turbine		$ 67,601	$ 46,787	$ 43,225	$ 37,845	$ 34,882	$ 36,834	$ 34,713
Newman 6		$ 46,572	$ 43,877	$ 41,070	$ 38,505	$ 36,157	$ 34,982	$ 31,794

Present Value - 2022 (000)	**45 Year Life**	**5 years**
Life extension with gas turbine	$ 781,412	$ 230,340
Newman 6	$ 723,283	$ 206,182
Difference	**$ 58,129**	**$ 24,158**

MWH Generation							
Life extension with gas turbine							
Newman 1	199,728	199,728	199,728	199,728	199,728		
Newman 2	199,728	199,728	199,728	199,728	199,728		
Rio 7	126,144	126,144	126,144	126,144	126,144		
Gas Turbine	0	0	0	0	0	694,142	694,142
Total	525,600	525,600	525,600	525,600	525,600	694,142	694,142
Present value - life	8,724,886						
Present value - 5 years	2,153,622						
Newman 6	694,142	694,142	694,142	694,142	694,142	694,142	694,142
Present value	9,415,480						
Present value - 5 years	2,844,217						

Levelized Cost of Energy	**45 Year Life**	**5 years**
Life extension with gas turbine	$ 89 56	$ 106 95
Newman 6	$ 82 90	$ 72 49

Discount Rate	7 025%
Capital Cost Inflation Rate	2 0%

8	9	10	11	12	13	14	15	16	17	18	19	20
2030	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**
$ 55,960	$ 55,922	$ 55,920	$ 57,779	$ 56,005	$ 56,090	$ 56,200	$ 56,326	$ 61,991	$ 56,621	$ 56,790	$ 56,973	$ 57,170
$ 55,960	$ 55,922	$ 55,920	$ 57,779	$ 56,005	$ 56,090	$ 56,200	$ 56,326	$ 61,991	$ 56,621	$ 56,790	$ 56,973	$ 57,170
$ 51,393	$ 51,478	$ 51,586	$ 56,753	$ 51,846	$ 51,998	$ 52,159	$ 52,334	$ 54,531	$ 52,726	$ 52,943	$ 53,175	$ 53,421
$ 32,509	$ 30,354	$ 28,360	$ 27,380	$ 24,797	$ 23,205	$ 21,724	$ 20,344	$ 20,920	$ 17,854	$ 16,732	$ 15,684	$ 14,705
$ 29,855	$ 27,942	$ 26,163	$ 26,894	$ 22,956	$ 21,512	$ 20,162	$ 18,902	$ 18,403	$ 16,625	$ 15,598	$ 14,638	$ 13,741
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142

21	22	23	24	25	26	27	28	29	30	31	32	33
2043	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**2053**	**2054**	**2055**
$ 59,582	$ 57,610	$ 57,853	$ 58,112	$ 58,387	$ 64,690	$ 59,060	$ 59,534	$ 60,025	$ 60,535	$ 63,705	$ 61,608	$ 62,173
$ 59,582	$ 57,610	$ 57,853	$ 58,112	$ 58,387	$ 64,690	$ 59,060	$ 59,534	$ 60,025	$ 60,535	$ 63,705	$ 61,608	$ 62,173
$ 59,173	$ 54,025	$ 54,451	$ 54,893	$ 55,351	$ 58,239	$ 56,316	$ 56,825	$ 57,351	$ 57,895	$ 64,397	$ 59,037	$ 59,637
$ 14,319	$ 12,937	$ 12,138	$ 11,392	$ 10,695	$ 11,072	$ 9,445	$ 8,896	$ 8,380	$ 7,897	$ 7,765	$ 7,016	$ 6,616
$ 14,221	$ 12,132	$ 11,425	$ 10,761	$ 10,139	$ 9,968	$ 9,006	$ 8,491	$ 8,007	$ 7,552	$ 7,849	$ 6,724	$ 6,346
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142

34	35	36	37	38	39	40	41	42	43	44	45
2056	**2057**	**2058**	**2059**	**2060**	**2061**	**2062**	**2063**	**2064**	**2065**	**2066**	**2067**
$ 62,758	$ 63,362	$ 70,491	$ 64,633	$ 65,299	$ 65,987	$ 66,698	$ 70,607	$ 68,186	$ 68,965	$ 69,768	$ 70,595
$ 62,758	$ 63,362	$ 70,491	$ 64,633	$ 65,299	$ 65,987	$ 66,698	$ 70,607	$ 68,186	$ 68,965	$ 69,768	$ 70,595
$ 60,257	$ 60,896	$ 64,457	$ 62,235	$ 62,937	$ 63,660	$ 64,405	$ 65,693	$ 67,007	$ 68,347	$ 69,714	$ 71,108
$ 6,240	$ 5,886	$ 6,119	$ 5,242	$ 4,948	$ 4,672	$ 4,413	$ 4,365	$ 3,938	$ 3,722	$ 3,518	$ 3,326
$ 5,991	$ 5,657	$ 5,595	$ 5,048	$ 4,769	$ 4,508	$ 4,261	$ 4,061	$ 3,870	$ 3,689	$ 3,515	$ 3,350
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142
694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142	694,142

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-14:

Provide EPE customer complaints regarding distribution or transmission service reliability issues in Texas for each of the last five calendar years including the test year.

RESPONSE:

Please see CEP 6-14, Attachment 1 – Confidential (Voluminous) for complaints regarding distribution or transmission service reliability issues in Texas, El Paso Electric Company ("EPE") responses, and Commission resolutions for each of the last five calendar years including the test year. EPE had 23 total complaints as shown in the table below.

Year	No.
2016	2
2017	19
2018	1
2019	1
2020	0

It should be noted the 19 complaints in 2017 were all related to outages that occurred at the Montwood substation in July 2017.

Preparer: M. Curtis Hutcheson Title: Manager – Regulatory Case Management

Sponsor: James Schichtl Title: Vice President – Regulatory & Governmental Affairs

PUBLIC

CEP 6-14 Attachment 1 is a CONFIDENTIAL and/or HIGHLY SENSITIVE PROTECTED MATERIALS and VOLUMINOUS attachment.

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-15:

Please provide EPE's total customers by class in Texas for each of the last five calendar years including the test year.

RESPONSE:

See EPE's response to CEP 5-22 and OPUC 1-8.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-16:

Please provide any tariffs or service terms and conditions offered by EPE in Texas that allow customers who desire higher service reliability to purchase such service.

RESPONSE:

El Paso Electric Company ("EPE") does not have any tariffs or service terms and conditions offered by EPE in Texas that allow customers who desire higher service reliability to purchase such service.

Preparer: Manuel Carrasco Title: Manager – Rate Research

Sponsor: Manuel Carrasco Title: Manager – Rate Research

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-17:

Reference page 9 of EPE witness Hawkins' direct testimony, please provide any economic analysis of costs and benefits of EPE's planned participation in the EIM in April 2023 as compared to continuation of current operations or other alternatives.

RESPONSE:

Please see CEP 6-17, Attachment 1, for E3's market benefits analyses and their respective study parameters. CEP 6-17, Attachment 2, provides Utilicast's Gap Assessment report detailing EPE's anticipated EIM implementation and ongoing costs. CEP 6-17, Attachment 3, provides a detailed reconciliation of Utilicast's initial study implementation costs and cost category allocation and EPE's final implementation cost estimates. Total ongoing EIM costs are estimated to be $2,885,000 million on an annual basis. EPE is not seeking cost recovery for EIM related expenses in this proceeding.

Preparer: Jesus Gonzalez Title: Manager – Day Ahead & Long-Term Trading

Sponsor: David C. Hawkins Title: Vice President – Strategy & Sustainability

Energy+Environmental Economics

EPE EIM Follow Up Benefits Study

Saamrat Kasina, Senior Consultant
Jack Moore, Director
Patrick O'Neill, Consultant

CONFIDENTIAL. FIRST DRAFT. FOR INTERNAL DISCUSSION ONLY

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 1 of 53

Key changes

- **Original 2023 old portfolio used in Basecase and Sensitivity 1:**
  - Newman 3
  - Newman 4, GT1, GT2
  - Newman 5, GT3, GT4
  - Newman 6
  - Montana Power Station 1, 2, 3, 4
  - Copper 1
  - Rio Grande 8, 9
  - 272 MW Solar
  - 100 MW Shaped Solar (Solar + Battery)
  - 50 MW/200 MWh Battery
- **In 2023 Basecase and 2023 Sensitivity 1 with the new portfolio:**
  - Removed 50MW/200MWh Battery
  - Added 70 MW of Solar (342 MW Solar + 100 MW Shaped Solar)

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 2 of 53

New Portfolio Basecase and Sensitivity 1 EIM Benefits compared to Old Portfolio

	2023 EIM Basecase no Price Bounds ($million)	2023 EIM Basecase with Price Bound ($million)	2023 EIM Sensitivity 1 no Price Bounds ($million)	2023 EIM Sensitivity 1 with Price Bounds ($million)
Old Portfolio	3.6	2.1	23.0	15.9
New Portfolio	5.4	3.0	24.5	16.3

- Market prices are bound [-$30/MWh, $100/MWh]
- All cases in the following slides refer to the Basecase and Sensitivity 1 scenarios with the *new portfolio*

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 3 of 53

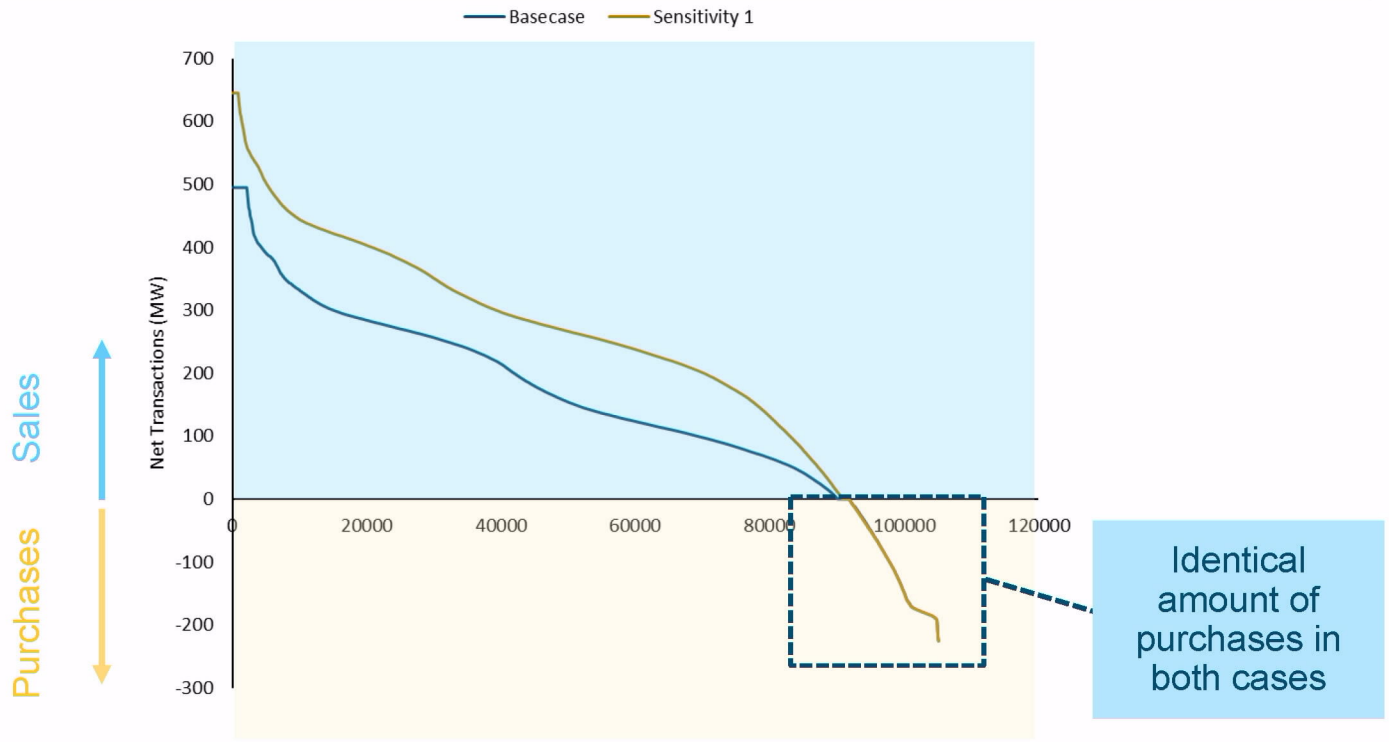
Basecase and Sensitivity 1 Benefits Breakdown

	2023 EIM Basecase no Price Bounds		2023 EIM Basecase with Price Bound		2023 EIM Sensitivity 1 with Price Bounds	
	Total Cost (2018$MM/year)	Average Price (2018$/MWh)	Total Cost (2018$MM/year)	Average Price (2018$/MWh)	Total Cost (2018$MM/year)	Average Price (2018$/MWh)
DA/HA Purchases	$ 0	$ 15	$ 0	$ 15	$ 0	$ 15
RT15 Purchases	$ 4	$ 12	$ 5	$ 15	$ 4	$ 13
RT5 Purchases	$ 2	$ 11	$ 2	$ 12	$ 4	$ 15
DA/HA Sales	$ (62)	$ 34	$ (62)	$ 34	$ (62)	$ 34
RT15 Sales	$ (2)	$ 36	$ (2)	$ 30	$ (29)	$ 35
RT5 Sales	$ (2)	$ 41	$ (1)	$ 24	$ (2)	$ 27

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 4 of 53

Basecase and Sensitivity 1 Total Net Transactions (DA, HA, RT15, RT5)

The majority of 5-minute intervals show El Paso in a net sales position, with more sales potential in the Sensitivity 1 case relative to the Basecase



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 5 of 53

Basecase and Sensitivity 1 Average Total Net Transactions (DA, HA, RT15, RT5)

On average El Paso sells power in a large majority of hours across the year (Sensitivity 1 sells more during these hours due to increase transmission). Regardless of scenario, purchase periods occur during summer afternoon due to favorable market prices and/or high demand straining internal generation.

Basecase

Month \ Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	229	259	262	200	258	214	226	187	137	196	207	198	224	237	245	240	258	182	170	197	181	254	267	201
2	233	166	198	273	247	254	192	180	191	228	259	269	263	250	241	237	248	278	227	213	216	155	171	225
3	261	203	274	282	270	267	184	176	203	210	222	222	194	185	183	163	184	257	262	248	189	228	247	244
4	254	255	248	270	272	258	201	183	203	209	224	228	209	193	139	74	91	272	280	220	248	274	273	268
5	177	183	194	224	234	229	219	203	212	185	138	97	78	-3	-32	-38	-10	97	102	-84	-89	-22	49	133
6	107	153	171	169	180	107	123	154	152	128	60	-7	-62	-4	-38	-42	-15	-54	40	50	-83	123	117	124
7	74	72	73	120	164	116	140	150	119	74	90	85	101	106	103	71	93	77	97	66	20	114	119	56
8	112	128	124	135	125	113	102	79	48	36	21	-7	9	24	37	7	24	27	72	20	38	44	79	106
9	85	191	159	209	204	192	107	136	136	116	64	38	17	-5	-59	-38	37	26	-40	-81	10	117	111	128
10	343	317	330	337	346	341	311	211	134	116	104	118	124	110	108	246	295	289	251	261	281	269	299	296
11	179	176	194	192	185	183	157	141	167	166	175	184	192	179	186	176	170	113	86	76	78	124	131	168
12	175	178	177	178	181	182	172	161	156	156	160	165	177	168	162	168	150	132	114	81	122	137	137	160

Sensitivity 1

Month \ Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	298	367	367	274	362	291	317	270	188	241	232	221	250	267	281	290	364	240	247	288	265	350	371	259
2	313	214	251	384	348	350	253	232	230	268	293	305	299	289	272	267	341	387	336	306	303	221	246	310
3	359	279	380	396	388	389	251	214	266	273	284	280	256	232	230	206	246	374	362	350	280	333	370	351
4	383	384	361	406	409	382	278	201	225	228	248	252	237	221	170	94	116	354	360	287	342	374	371	403
5	260	257	263	336	366	350	311	255	267	227	169	126	110	11	-22	-31	17	178	191	-61	-68	3	90	192
6	195	275	298	272	305	168	172	206	219	200	100	19	-50	15	-18	-20	12	-26	98	96	-67	244	244	248
7	157	144	155	229	311	212	258	271	212	149	187	182	206	213	210	171	202	175	193	143	98	245	256	151
8	239	268	263	277	257	236	214	150	95	98	93	47	80	115	126	64	93	94	152	80	122	150	204	236
9	125	323	247	353	350	337	158	172	172	146	86	58	51	39	-32	5	119	106	9	-50	72	237	212	226
10	453	413	423	438	453	473	428	257	153	129	111	131	140	130	125	334	407	386	317	333	378	368	431	407
11	326	308	343	341	334	329	278	251	288	270	279	293	304	276	295	304	315	225	184	172	162	235	254	314
12	317	322	326	326	325	314	308	289	287	276	278	269	283	273	262	298	281	251	220	159	231	264	257	297

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 6 of 53

Basecase and Sensitivity 1 Average Net Real Time Transactions (RT15, RT5)

El Paso is a purchaser on average during the midday in the real time EIM Basecase market. Similar amounts of sales and purchases in other hours show near zero average transactions. The Sensitivity 1 scenario allows El Paso to take advantage of favorable price spreads with the increased available transmission in the shape of more sales.

Basecase

Month \ Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-51	-14	-15	-69	-12	-48	-28	-58	-114	-81	-63	-69	-69	-63	-56	-69	-24	-78	-82	-68	-83	-12	-11	-82
2	-50	-87	-71	-11	-31	-25	-84	-96	-87	-62	-22	-17	-30	-45	-47	-48	-49	-1	-49	-65	-61	-119	-107	-66
3	-21	-80	-18	-7	-14	-5	-80	-88	-63	-73	-63	-71	-101	-91	-88	-89	-88	-20	5	2	-61	-29	-19	-22
4	-5	-3	-6	3	2	-4	-69	-69	-80	-72	-45	-45	-43	-17	-36	-91	-149	-13	6	-41	-30	-11	0	12
5	3	10	7	22	0	-4	-26	-62	-42	-39	-56	-57	-31	-77	-66	-86	-142	-85	-79	-260	-266	-205	-131	-39
6	-40	-20	-15	-24	-7	-76	-73	-47	-34	-41	-82	-129	-187	-143	-171	-174	-161	-209	-105	-91	-219	-15	-16	-24
7	-71	-80	-84	-43	-1	-39	-22	-11	-19	-47	-26	-39	-27	-23	-23	-51	-27	-45	-30	-60	-101	-14	-7	-76
8	-15	-4	-11	-3	-6	-9	-24	-55	-55	-57	-47	-66	-65	-79	-80	-94	-77	-81	-33	-74	-52	-58	-28	-9
9	-115	-14	-52	1	4	1	-95	-76	-69	-47	-63	-62	-94	-111	-165	-167	-99	-101	-162	-205	-118	-16	-51	-57
10	-9	-38	-25	-14	12	10	-15	-111	-93	-100	-83	-70	-62	-83	-175	-61	-5	-4	-41	-39	-19	-30	-11	-21
11	-5	-17	0	2	3	-1	-16	-15	-8	-26	-21	-17	-12	-18	-1	-2	8	-32	-65	-85	-77	-31	-35	-7
12	-5	-1	-1	-1	-2	2	6	-1	-11	-19	-20	-24	-16	-23	-24	1	3	-2	-35	-76	-23	-1	-17	-7

Sensitivity 1

Month \ Hour	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	18	94	89	5	92	29	63	25	-62	-36	-37	-46	-44	-33	-20	-20	81	-19	-5	23	2	84	94	-24
2	30	-39	-18	100	69	71	-23	-43	-48	-21	12	18	7	-6	-16	-19	44	108	60	28	26	-53	-32	19
3	76	-4	89	106	104	118	-13	-50	0	-10	-2	-13	-39	-44	-41	-46	-26	96	106	105	30	76	103	85
4	124	126	107	139	139	120	8	-51	-59	-53	-21	-21	-16	10	-5	-71	-123	69	86	26	64	90	98	147
5	86	84	76	134	133	117	67	-10	14	3	-24	-28	0	-63	-56	-79	-115	-4	10	-237	-245	-180	-91	20
6	47	101	112	78	118	-15	-24	5	33	31	-41	-104	-175	-124	-151	-151	-133	-181	-47	-44	-203	105	111	99
7	12	-8	-3	65	146	57	96	109	74	28	71	58	78	84	84	49	82	54	66	18	-24	116	129	20
8	112	136	127	139	126	115	88	15	-8	4	24	-11	6	12	10	-37	-8	-13	47	-14	33	48	96	121
9	-75	118	36	145	149	145	-45	-39	-33	-17	-41	-42	-60	-67	-138	-124	-17	-21	-113	-174	-55	104	51	42
10	101	59	68	87	120	142	103	-65	-75	-87	-76	-57	-46	-64	-158	27	106	93	25	33	77	69	122	89
11	142	115	149	151	152	145	106	95	113	79	83	91	100	79	108	126	153	81	33	11	7	80	88	139
12	137	143	148	147	142	134	142	127	120	101	99	81	90	82	77	131	133	116	71	1	86	127	103	130

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 7 of 53

Basecase Cost Comparison No Price Bounds

Resource	No EIM Total Cost (2018$MM/year)	No EIM Average Price (2018$/MWh)	EIM Total Cost (2018$MM/year)	EIM Average Price (2018$/MWh)
PVNGS	$ 39.6	$ 7	$ 39.6	$ 7
Montana Power Station 1	$ 8.8	$ 20	$ 7.6	$ 20
Montana Power Station 2	$ 13.4	$ 20	$ 11.9	$ 20
Montana Power Station 3	$ 6.1	$ 21	$ 5.2	$ 21
Montana Power Station 4	$ 11.4	$ 20	$ 9.4	$ 20
Newman 3	$ 3.8	$ 23	$ 3.3	$ 23
Newman 4 ST	$ 3.4	$ 35	$ 3.4	$ 35
Newman 5 ST	$ 14.4	$ 27	$ 14.1	$ 27
Newman 6	$ 8.1	$ 22	$ 7.6	$ 22
Rio Grande 8	$ 5.2	$ 24	$ 4.7	$ 24
Rio Grande 9	$ 2.0	$ 21	$ 1.8	$ 21
BTM Solar	$ -	$ -	$ -	$ -
Solar + Battery	$ -	$ -	$ -	$ -
Solar	$ -	$ -	$ -	$ -
Copper 1	$ 0.1	$ 46	$ 0.0	$ 48
Newman GT1	$ 3.8	$ 30	$ 3.8	$ 30
Newman GT2	$ 3.8	$ 31	$ 3.8	$ 31
Newman GT3	$ 8.5	$ 28	$ 8.4	$ 28
Newman GT4	$ 8.4	$ 28	$ 8.4	$ 28
DA/HA Purchases	$ 0.5	$ 15	$ 0.5	$ 15
RT15 Purchases	$ -	$ -	$ 4.5	$ 12
RT5 Purchases	$ -	$ -	$ 1.9	$ 11
DA/HA Sales	$ (61.6)	$ 34	$ (61.6)	$ 34
RT15 Sales	$ -	$ -	$ (1.9)	$ 36
RT5 Sales	$ -	$ -	$ (2.3)	$ 41
Total generation cost	**$ 79.5**		**$ 74.1**	

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 8 of 53

Basecase Cost Comparison with Price Bounds

Resource	No EIM Total Cost (2018$MM/year)	No EIM Average Price (2018$/MWh)	EIM Total Cost (2018$MM/year)	EIM Average Price (2018$/MWh)
PVNGS	$ 39.6	$ 7	$ 39.6	$ 7
Montana Power Station 1	$ 8.8	$ 20	$ 7.6	$ 20
Montana Power Station 2	$ 13.4	$ 20	$ 11.9	$ 20
Montana Power Station 3	$ 6.1	$ 21	$ 5.2	$ 21
Montana Power Station 4	$ 11.4	$ 20	$ 9.4	$ 20
Newman 3	$ 3.8	$ 23	$ 3.3	$ 23
Newman 4 ST	$ 3.4	$ 35	$ 3.4	$ 35
Newman 5 ST	$ 14.4	$ 27	$ 14.1	$ 27
Newman 6	$ 8.1	$ 22	$ 7.6	$ 22
Rio Grande 8	$ 5.2	$ 24	$ 4.7	$ 24
Rio Grande 9	$ 2.0	$ 21	$ 1.8	$ 21
BTM Solar	$ -	$ -	$ -	$ -
Solar + Battery	$ -	$ -	$ -	$ -
Solar	$ -	$ -	$ -	$ -
Copper 1	$ 0.1	$ 46	$ 0.0	$ 48
Newman GT1	$ 3.8	$ 30	$ 3.8	$ 30
Newman GT2	$ 3.8	$ 31	$ 3.8	$ 31
Newman GT3	$ 8.5	$ 28	$ 8.4	$ 28
Newman GT4	$ 8.4	$ 28	$ 8.4	$ 28
DA/HA Purchases	$ 0.5	$ 15	$ 0.5	$ 15
RT15 Purchases	$ -	$ -	$ 5.3	$ 15
RT5 Purchases	$ -	$ -	$ 2.2	$ 12
DA/HA Sales	$ (61.6)	$ 34	$ (61.6)	$ 34
RT15 Sales	$ -	$ -	$ (1.6)	$ 30
RT5 Sales	$ -	$ -	$ (1.3)	$ 24
Total generation cost	**$ 79.5**		**$ 76.6**	

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 9 of 53

Sensitivity 1 Cost Comparison with Price Bounds

	No EIM		EIM	
Resource	Total Cost (2018$MM/year)	Average Price (2018$/MWh)	Total Cost (2018$MM/year)	Average Price (2018$/MWh)
PVNGS	$ 39.6	$ 7	$ 39.6	$ 7
Montana Power Station 1	$ 8.8	$ 20	$ 9.8	$ 20
Montana Power Station 2	$ 13.4	$ 20	$ 12.8	$ 20
Montana Power Station 3	$ 6.1	$ 21	$ 8.5	$ 21
Montana Power Station 4	$ 11.4	$ 20	$ 10.6	$ 20
Newman 3	$ 3.8	$ 23	$ 3.9	$ 24
Newman 4 ST	$ 3.4	$ 35	$ 3.4	$ 35
Newman 5 ST	$ 14.4	$ 27	$ 15.6	$ 27
Newman 6	$ 8.1	$ 22	$ 9.0	$ 22
Rio Grande 8	$ 5.2	$ 24	$ 5.4	$ 24
Rio Grande 9	$ 2.0	$ 21	$ 4.1	$ 21
BTM Solar	$ -	$ -	$ -	$ -
Solar + Battery	$ -	$ -	$ -	$ -
Solar	$ -	$ -	$ -	$ -
Copper 1	$ 0.1	$ 46	$ 0.0	$ 48
Newman GT1	$ 3.8	$ 30	$ 3.9	$ 30
Newman GT2	$ 3.8	$ 31	$ 3.8	$ 31
Newman GT3	$ 8.5	$ 28	$ 8.6	$ 28
Newman GT4	$ 8.4	$ 28	$ 8.7	$ 28
DA/HA Purchases	$ 0.5	$ 15	$ 0.5	$ 15
RT15 Purchases	$ -	$ -	$ 4.3	$ 13
RT5 Purchases	$ -	$ -	$ 4.2	$ 15
DA/HA Sales	$ (61.6)	$ 34	$ (61.6)	$ 34
RT15 Sales	$ -	$ -	$ (29.4)	$ 35
RT5 Sales	$ -	$ -	$ (2.1)	$ 27
Total generation cost	**$ 79.5**		**$ 63.3**	

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 10 of 53

Basecase Capacity Factor

Resource	No EIM Capacity Factors (%)	Basecase 2023 EIM Capacity Factors (%)	EIM – No EIM
PVNGS	100%	100%	0%
Montana Power Station 1	55%	47%	-8%
Montana Power Station 2	84%	75%	-9%
Montana Power Station 3	37%	32%	-5%
Montana Power Station 4	71%	59%	-13%
Newman 3	19%	17%	-3%
Newman 4 ST	12%	12%	0%
Newman 5 ST	47%	46%	-1%
Newman 6	18%	17%	-1%
Rio Grande 8	17%	16%	-1%
Rio Grande 9	12%	11%	-1%
BTM Solar	23%	23%	0%
Solar + Battery	24%	23%	0%
Solar	27%	26%	-1%
Copper 1	0%	0%	0%
Newman GT1	21%	21%	0%
Newman GT2	21%	21%	0%
Newman GT3	49%	49%	0%
Newman GT4	49%	49%	0%
EPE Battery	0%	0%	0%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 11 of 53

Sensitivity 1 Capacity Factor

Resource	No EIM Capacity Factors (%)	Sensitivity 2023 EIM Capacity Factors (%)	EIM – No EIM
PVNGS	100%	100%	0%
Montana Power Station 1	55%	61%	6%
Montana Power Station 2	84%	80%	-4%
Montana Power Station 3	37%	52%	15%
Montana Power Station 4	71%	66%	-5%
Newman 3	19%	19%	0%
Newman 4 ST	12%	12%	0%
Newman 5 ST	47%	51%	4%
Newman 6	18%	20%	2%
Rio Grande 8	17%	18%	1%
Rio Grande 9	12%	24%	12%
BTM Solar	23%	23%	0%
Solar + Battery	24%	27%	3%
Solar	27%	27%	0%
Copper 1	0%	0%	0%
Newman GT1	21%	21%	0%
Newman GT2	21%	21%	0%
Newman GT3	49%	50%	1%
Newman GT4	49%	50%	1%
EPE Battery	0%	0%	0%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 12 of 53

Basecase EIM and Sensitivity 1 EIM Capacity Factor Comparison

Resource	Basecase 2023 EIM Capacity Factors (%)	Sensitivity 2023 EIM Capacity Factors (%)	Basecase – Sensitivity
PVNGS	100%	100%	0%
Montana Power Station 1	47%	61%	-14%
Montana Power Station 2	75%	80%	-5%
Montana Power Station 3	32%	52%	-20%
Montana Power Station 4	59%	66%	-7%
Newman 3	17%	19%	-2%
Newman 4 ST	12%	12%	0%
Newman 5 ST	46%	51%	-5%
Newman 6	17%	20%	-3%
Rio Grande 8	16%	18%	-2%
Rio Grande 9	11%	24%	-13%
BTM Solar	23%	23%	0%
Solar + Battery	23%	27%	-4%
Solar	26%	27%	-1%
Copper 1	0%	0%	0%
Newman GT1	21%	21%	0%
Newman GT2	21%	21%	0%
Newman GT3	49%	50%	-1%
Newman GT4	49%	50%	-1%
EPE Battery	0%	0%	0%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 13 of 53

Basecase and Sensitivity 1 Average Curtailment

Curtailment occurs in the shoulder months and winter where system demand is low. More curtailment in the Basecase EIM scenario as real time prices are generally lower than DA or HA to the point where it is more economic to curtail solar. This is reduced with the extra transmission in the Sensitivity 1 scenario which allows more solar generation to be exported.

No EIM

Month	Hour 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	6.6	11.3	11.6	12.5	16.7	14.3	11.1	9.6	5.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	7.1	11.0	17.5	21.9	22.7	23.5	15.7	6.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	10.3	34.8	40.8	47.4	44.8	36.2	37.3	25.2	16.6	5.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	2.2	14.3	19.6	24.2	21.4	12.0	12.4	16.1	6.7	5.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	5.1	39.9	58.3	48.9	32.1	17.4	16.9	13.6	6.9	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	1.1	2.9	3.3	1.7	0.6	1.2	1.2	0.6	1.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.3	5.0	6.9	6.9	4.6	1.9	1.0	0.2	1.0	1.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.1	5.0	9.2	6.5	5.0	3.1	1.5	0.3	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	6.8	24.8	26.8	18.1	9.5	5.3	3.1	2.7	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	5.4	5.6	6.3	6.9	7.2	5.2	3.2	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	31.1	43.6	49.6	49.1	45.1	36.3	30.7	17.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	5.1	12.8	20.0	26.7	30.8	29.1	24.5	20.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 14 of 53

Basecase and Sensitivity 1 Average Curtailment

Basecase EIM

Month	Hour 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	8.9	13.1	15.6	32.3	34.1	26.8	20.0	13.8	5.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	13.4	18.1	20.7	27.4	41.0	48.4	36.0	17.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	15.2	57.6	78.0	82.9	87.7	105.6	102.2	84.8	65.4	22.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.1	7.8	33.0	58.0	56.1	31.9	25.4	24.4	9.2	14.4	14.1	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	4.9	46.1	84.9	54.9	26.9	17.7	18.3	19.2	21.6	14.0	11.0	4.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.4	8.5	13.4	11.0	10.5	2.1	1.1	12.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.2	4.2	6.6	5.8	3.7	1.4	0.7	0.1	0.2	0.5	1.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.1	5.0	9.4	7.0	4.1	2.4	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	6.7	25.0	39.1	16.0	9.8	4.4	2.4	1.1	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	18.1	23.2	6.9	5.3	4.7	6.2	2.9	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	30.4	52.1	56.3	57.5	48.4	44.6	26.7	13.2	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.3	14.4	23.5	26.5	29.3	34.4	25.9	16.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sensitivity 1 EIM

Month	Hour 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.3	5.3	20.5	22.1	16.4	10.7	6.1	2.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	8.6	12.0	12.4	16.1	25.8	34.3	26.3	12.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.7	8.5	27.0	43.9	49.2	59.8	82.4	85.9	69.3	54.1	18.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.1	5.8	22.0	43.8	45.6	20.5	13.9	14.2	1.3	8.3	10.3	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.3	17.8	51.3	19.0	5.2	9.8	11.4	12.3	16.8	12.1	10.4	4.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.2	7.1	10.5	9.6	9.8	1.8	0.0	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.8	4.8	16.8	1.3	2.2	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	13.6	20.6	3.4	0.5	1.9	4.9	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.8	13.9	13.2	17.7	12.2	18.9	2.7	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	6.1	1.2	2.8	8.4	6.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 15 of 53

Energy+Environmental Economics

EPE EIM Benefits Study Final Presentation

December 23, 2019

Saamrat Kasina, Senior Consultant
Jack Moore, Director
Patrick O'Neill, Consultant
Jun Zhang, Consultant
Clea Kolster, Consultant

CONFIDENTIAL. FOR INTERNAL DISCUSSION ONLY

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 16 of 53

Agenda

- Overview of Project
- 2023 Base Case Analysis
- Comparison of 2023 Base Case and 2018 Historical Benchmark
- 2023 Sensitivity Analyses
- Appendix
  - 2018 Historical Analysis

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 17 of 53

Study approach

- **E3 model will estimate cost to serve EPE's load**
  - Includes variable cost of all owned or contracted resources + market purchases – market sales revenue
- **BAU Case allows EPE to transact day ahead, but must adjust own dispatch to balance in real-time**
- **EIM Case also enables EPE to buy and sell with the EIM in real-time**
  - Assumes that EPE is a price taker for EIM trades
  - EIM benefit to EPE is the reduction in variable cost to serve load relative to the BAU Case
  - Savings come from (1) EPE selling in intervals with high EIM prices & (2) EPE buying in intervals with low EIM prices (or high EPE need)

Benefits Calculation

"2018 BAU Case"
Cost to Serve Load
(without EPE EIM Participation)

−

"2018 EIM Case"
Cost to Serve Load
(with EPE EIM Participation)

=

Benefit of EPE EIM Participation

Scenarios to model

- **2018 Benchmark Scenario**: to calibrate model's dispatch compared to EPE's actual operations
- **2023 Core Scenario**: to estimate benefits that reflect EPE planned changes in year EPE would join
- **2023 Sensitivity Scenarios (optional):** to identify impact of other external factors on EPE EIM savings

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 18 of 53

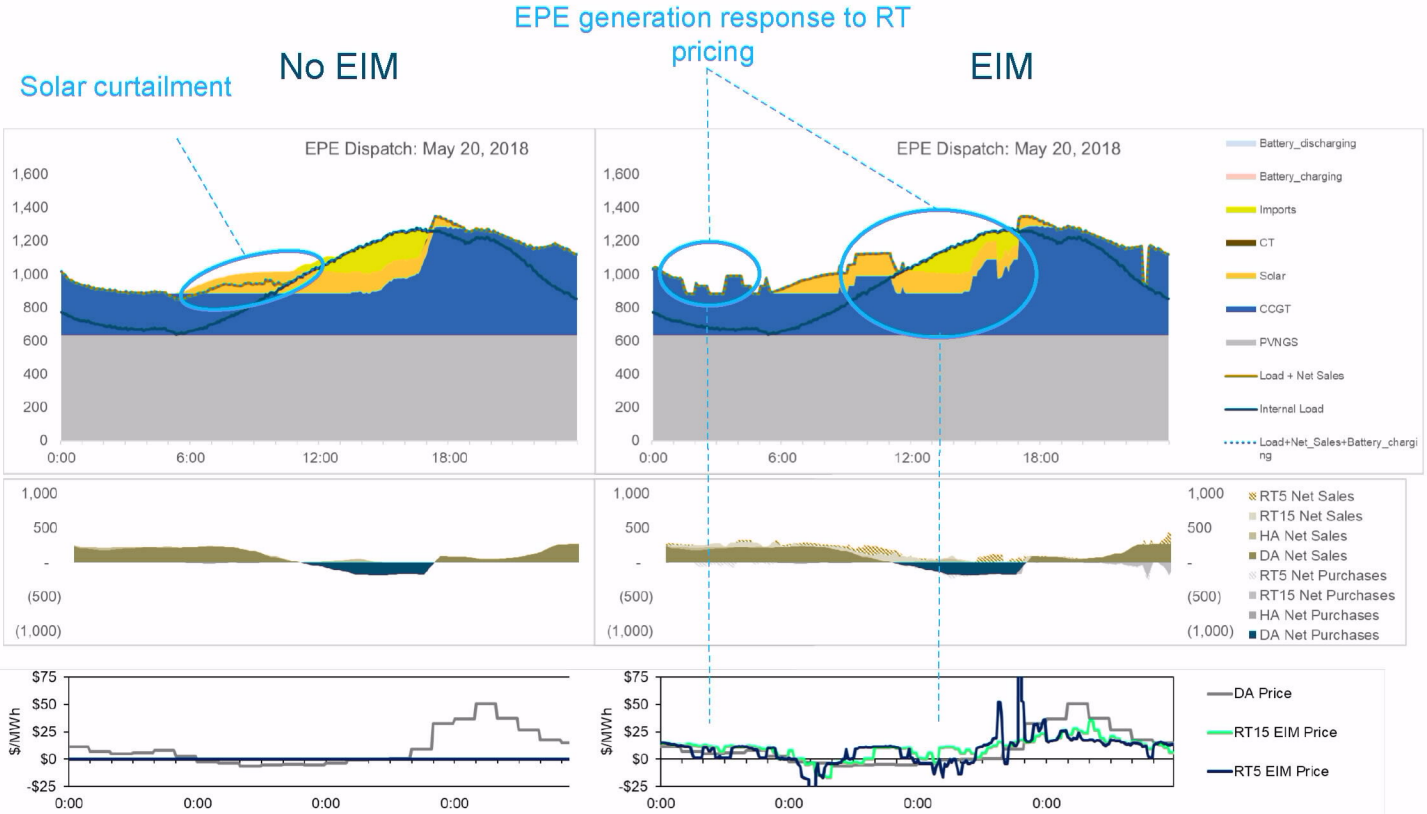
Study Approach: Four-staged modeling framework for bilateral markets & EIM

Load & Renewables Forecasts used*	Stage	Commitment Decisions	Transactional Decision
Day ahead forecast (Hourly increments)	Day Ahead (DA)	Newman 4 (long-start)	Day ahead sales and purchases
Hourly ahead forecast (Hourly)	Hour Ahead (HA)	CCGTs committed	Additional sales and purchases
15-min ahead forecast (15 min increments)	15-min Ahead (RT15)	CTs committed	Trading stops here in the base case In EIM case: additional sales and purchases (no hurdle rates)
Actual load & renewables (5 min increments)	Real Time 5 Minute (RT5)	Fuel burn + production costs	In EIM case: additional EIM sales and purchases (no hurdle rates)

*Subject to data availability

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 19 of 53

2018 dispatch day (May 20): EIM helps reduce solar curtailment



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 20 of 53

Energy+Environmental Economics

2023 Base Case Analysis

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 21 of 53

Key changes

- **Capacity Retirement**
  - Newman 1, Newman 2, Rio Grande 6, Rio Grande 7
- **New Capacity**
  - Newman 6
  - 170MW of Solar Capacity
  - 100MW Solar + Battery
  - 50MW/200MWh Battery
- **Changes to must-run generators**
- **Increase in gas prices**
- **Increase in EPE Load**
- **Changes to market prices**

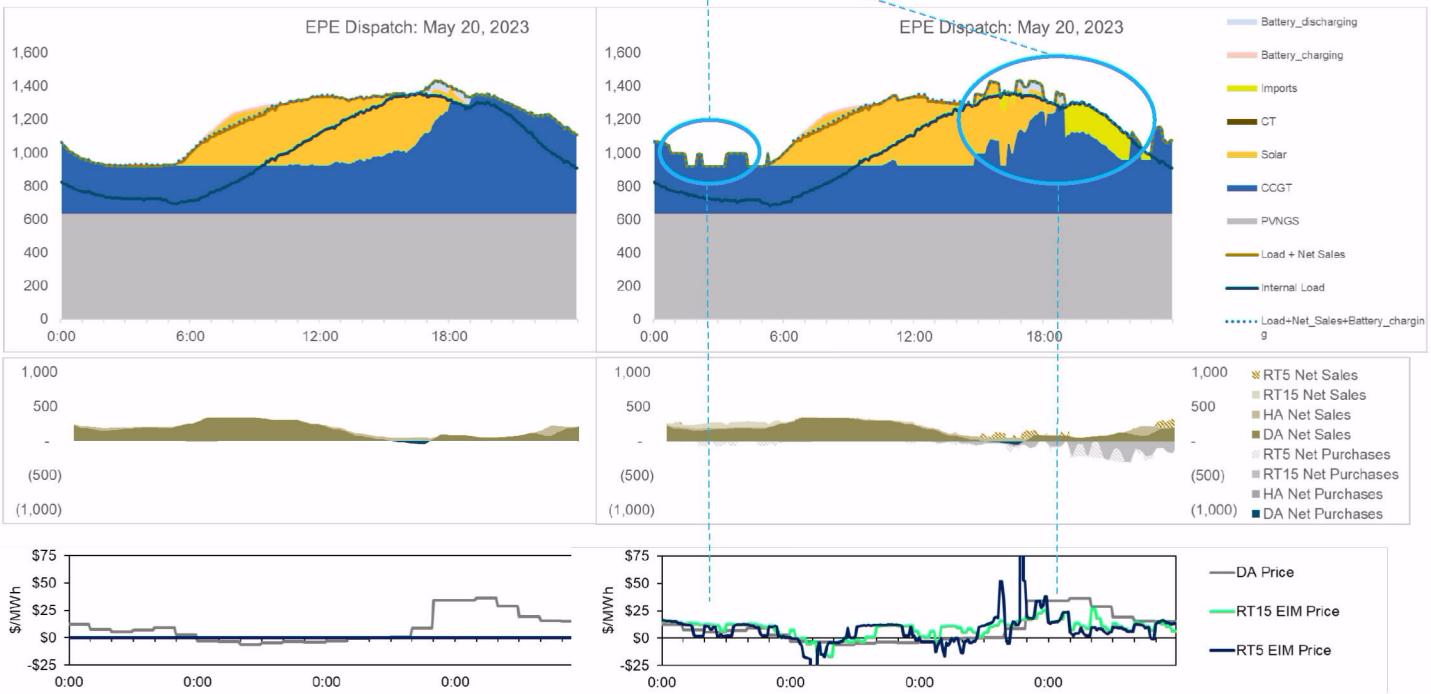
SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 22 of 53

2023 dispatch day (May 20)

EPE generation response to RT pricing

No EIM

EIM

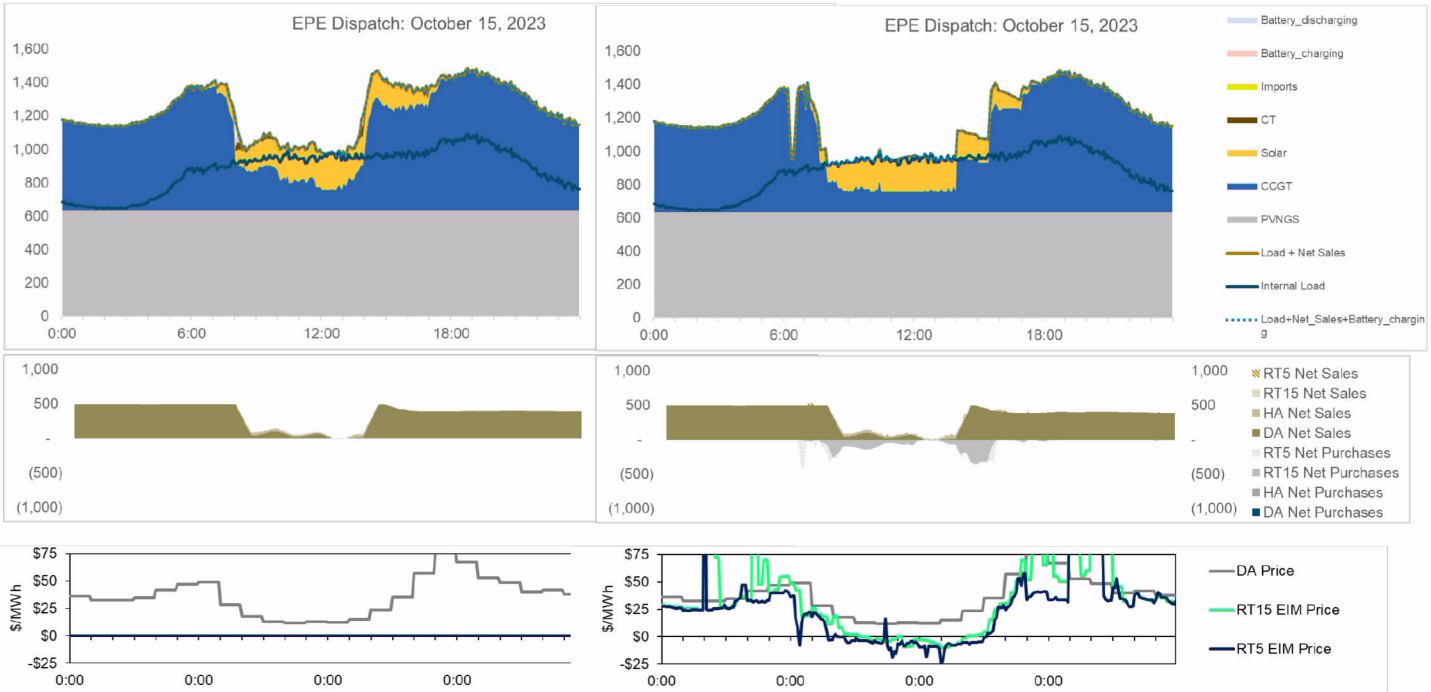


SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 23 of 53

2023 dispatch day (October 15)

No EIM

EIM

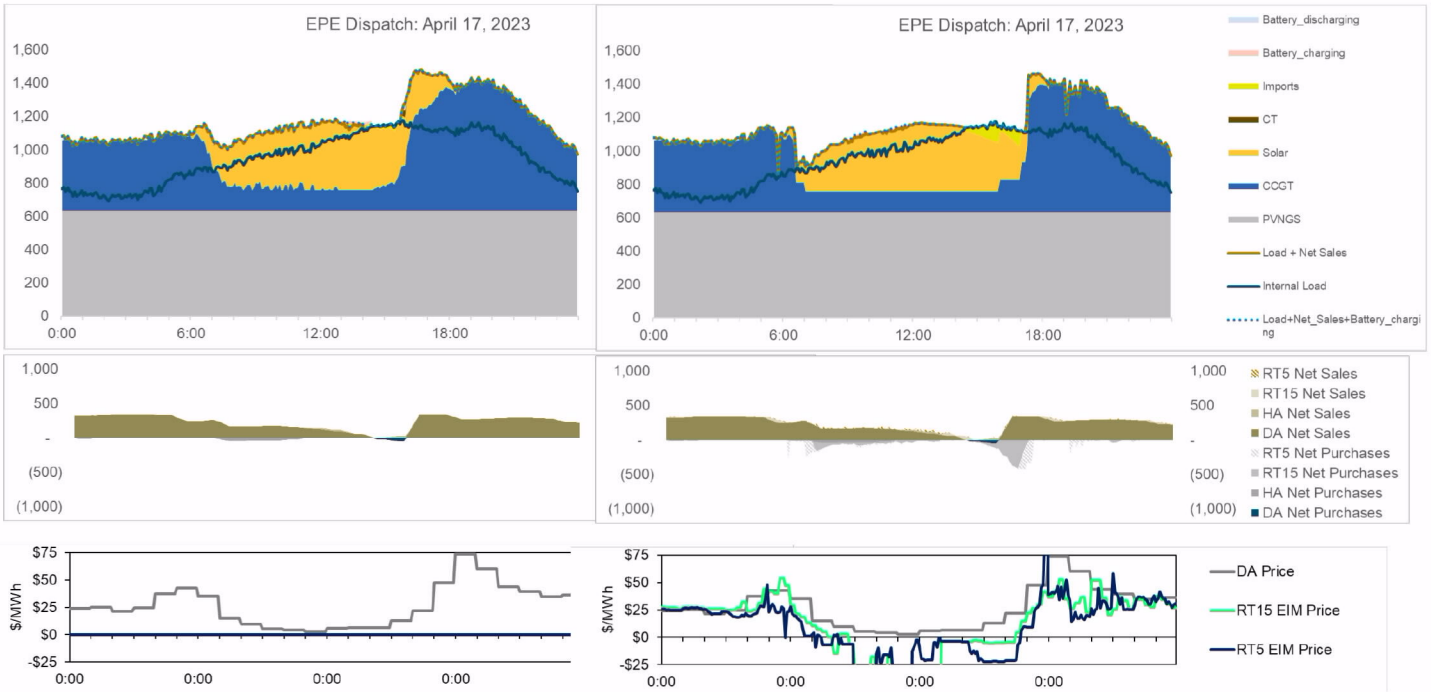


SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 24 of 53

2023 dispatch day (April 17)

No EIM

EIM

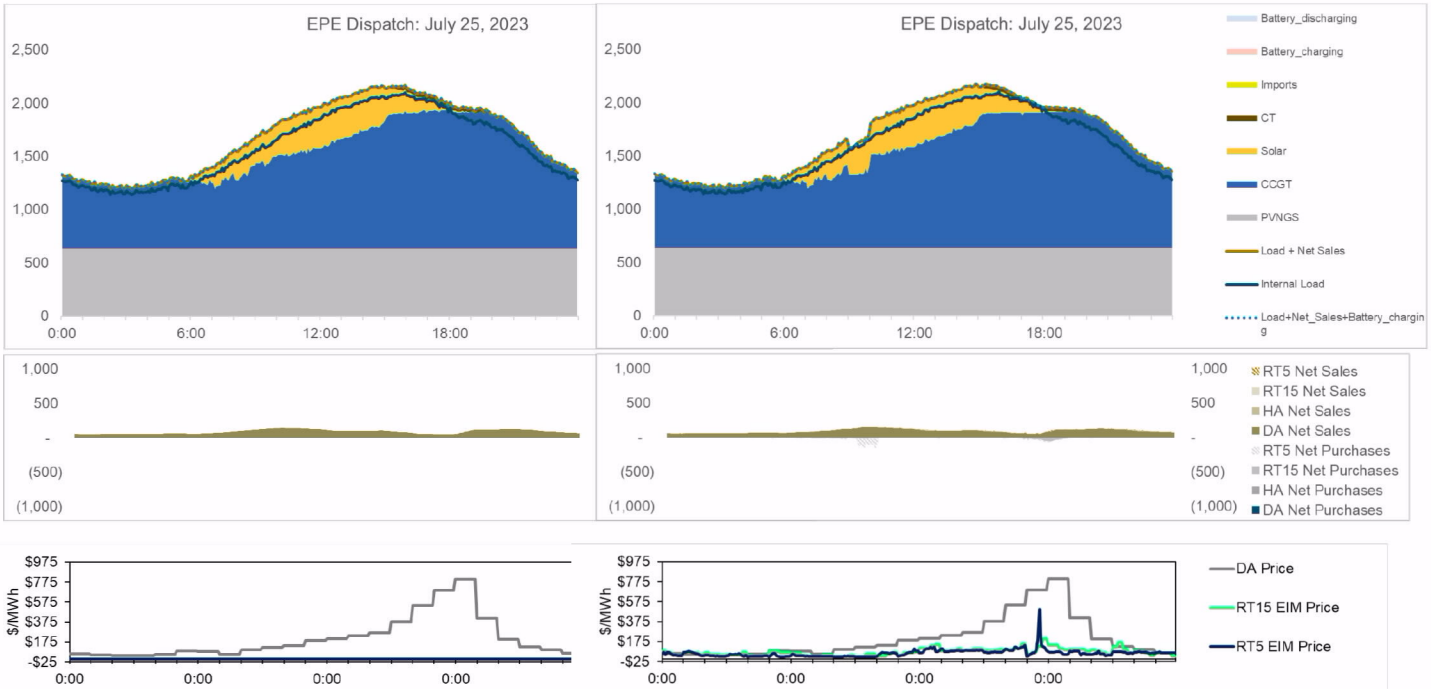


SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 25 of 53

2023 dispatch day (peak)

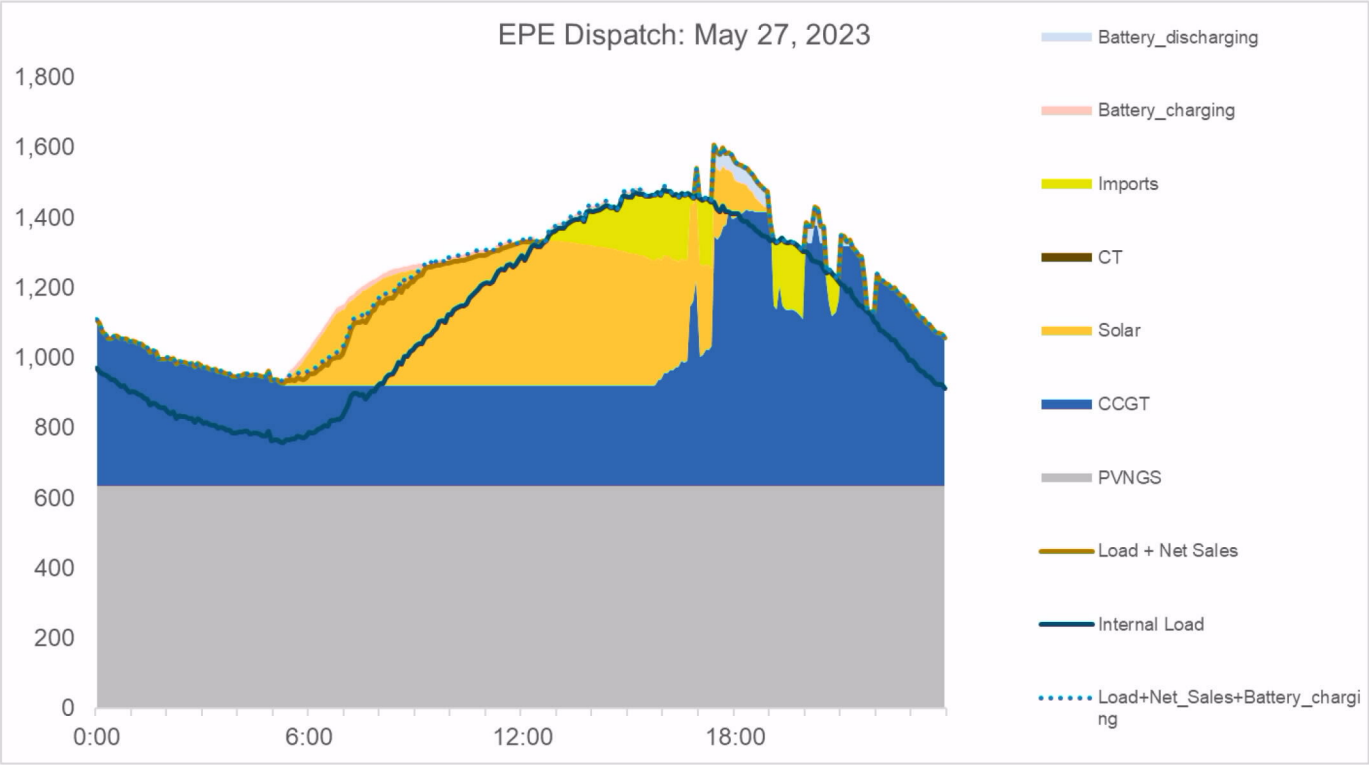
No EIM

EIM



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 26 of 53

2023 Stand Alone Battery Operations



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 27 of 53

2023 Stand Alone Battery Operations

- Free Operation: Battery 18$/MWh VO&M charge split between charge and discharge (9$/MWh for charge and discharge) in Summer and Winter
- Semi Restricted: Battery 72$/MWh VO&M charge split between charge and discharge (36$/MWh for charge and discharge) in Winter and 18$/MWh VO&M charge in Summer

	# Cycles (No EIM)	# Cycles (EIM)
Free Operation	504	345
Semi Restricted Operation	237	193

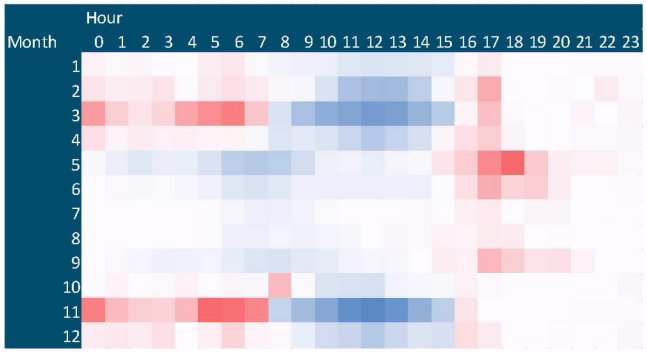
- Total cycles are around the EPE annual cycling limit of 150

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 28 of 53

2023 Stand Alone Battery Operations

- Battery used more often in the No EIM case, as there is more arbitrage opportunity compared to a scenario where there is a RT market
- Battery is frequently used in the shoulder months due to low midday prices favorable for charging.
- Discharged during the peak in the summer months as well as early morning in the winter months
- Average Charge (blue) & Discharge (red) Profiles

No EIM



EIM

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 29 of 53

Historical vs. 2023 No EIM Comparison

Resource	2018 No EIM Capacity Factors (%)	2023 No EIM Capacity Factors (%)	2023 - 2018
PVNGS	100%	100%	0%
Montana Power Station 1	44%	38%	-7%
Montana Power Station 2	48%	65%	18%
Montana Power Station 3	61%	23%	-37%
Montana Power Station 4	63%	52%	-11%
Newman 1	3%	0%	-3%
Newman 2	3%	0%	-3%
Newman 3	27%	14%	-13%
Newman 4 ST	64%	34%	-30%
Newman 5 ST	39%	93%	54%
Newman 6	0%	10%	10%
Rio Grande 6	2%	0%	-2%
Rio Grande 7	4%	0%	-4%
Rio Grande 8	29%	16%	-13%
Rio Grande 9	11%	1%	-10%
BTM Solar	23%	23%	0%
Solar + Battery	0%	28%	28%
Solar	28%	28%	1%
Copper 1	3%	3%	-1%
Newman GT1	33%	22%	-11%
Newman GT2	42%	21%	-22%
Newman GT3	32%	66%	34%
Newman GT4	38%	66%	27%
EPE Battery	0%	1%	1%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 30 of 53

2023 Capacity Factor changes due to EIM

Resource	2023 No EIM Capacity Factors (%)	2023 EIM Capacity Factors (%)	EIM – No EIM
PVNGS	100%	100%	0%
Montana Power Station 1	38%	36%	-2%
Montana Power Station 2	65%	63%	-3%
Montana Power Station 3	23%	22%	-1%
Montana Power Station 4	52%	50%	-2%
Newman 1	0%	0%	0%
Newman 2	0%	0%	0%
Newman 3	14%	13%	0%
Newman 4 ST	34%	31%	-2%
Newman 5 ST	93%	89%	-4%
Newman 6	10%	9%	-1%
Rio Grande 6	0%	0%	0%
Rio Grande 7	0%	0%	0%
Rio Grande 8	16%	15%	-1%
Rio Grande 9	1%	1%	0%
BTM Solar	23%	23%	0%
Solar + Battery	28%	28%	0%
Solar	28%	28%	0%
Copper 1	3%	0%	-2%
Newman GT1	22%	22%	0%
Newman GT2	21%	21%	0%
Newman GT3	66%	63%	-3%
Newman GT4	66%	63%	-3%
EPE Battery	1%	1%	0%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 31 of 53

2023 Cost Comparison

Resource	No EIM Total Generation Cost (2018$MM/year)	No EIM Average Cost (2018$/MWh)	EIM Total Generation Cost (2018$MM/year)	EIM Average Cost (2018$/MWh)
PVNGS	$ 40	$ 7	$ 40	$ 7
Montana Power Station 1	$ 6	$ 20	$ 6	$ 21
Montana Power Station 2	$ 11	$ 20	$ 10	$ 20
Montana Power Station 3	$ 4	$ 21	$ 4	$ 21
Montana Power Station 4	$ 8	$ 20	$ 8	$ 21
Newman 1	$ -	$ -	$ -	$ -
Newman 2	$ -	$ -	$ -	$ -
Newman 3	$ 3	$ 25	$ 3	$ 25
Newman 4 ST	$ 10	$ 39	$ 10	$ 41
Newman 5 ST	$ 30	$ 28	$ 29	$ 29
Newman 6	$ 4	$ 21	$ 4	$ 21
Rio Grande 6	$ -	$ -	$ -	$ -
Rio Grande 7	$ -	$ -	$ -	$ -
Rio Grande 8	$ 5	$ 26	$ 5	$ 27
Rio Grande 9	$ 0	$ 23	$ 0	$ 23
BTM Solar	$ -	$ -	$ -	$ -
Solar + Battery	$ -	$ -	$ -	$ -
Solar	$ -	$ -	$ -	$ -
Copper 1	$ 2	$ 131	$ 0	$ 102
Newman GT1	$ 5	$ 35	$ 5	$ 35
Newman GT2	$ 5	$ 37	$ 5	$ 37
Newman GT3	$ 13	$ 32	$ 13	$ 32
Newman GT4	$ 13	$ 32	$ 12	$ 32
EPE Battery	$ 0	$ 67	$ 0	$ 62
DA/HA Purchases	$ 1	$ 14	$ 1	$ 14
RT15 Purchases	$ -	$ -	$ 3	$ 14
RT5 Purchases	$ -	$ -	$ 2	$ 12
DA/HA Sales	$ (60)	$ (35)	$ (60)	$ (35)
RT15 Sales	$ -	$ -	$ (2)	$ (34)
RT5 Sales	$ -	$ -	$ (2)	$ (42)
Total generation cost	**99**		**$ 95**	

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 32 of 53

2023 Base Case EIM Benefits

- **Annual EIM Benefits: $4.3 Million**
- **If market prices are bound [-$30/MWh, $100/MWh]**
  - Annual EIM Benefits are $3 Million
- **Factors that can affect EIM benefits:**

Potential to increase EIM benefits	Potential to decrease EIM benefits
Flexibility of Palo Verde share generation	Implement bounds on RT prices
Limit DA sales and purchases to on-peak and off-peak blocks	Access to HA prices that are in between DA and RT EIM prices
Higher import transmission limits	
Higher export transmission limits*	

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 33 of 53

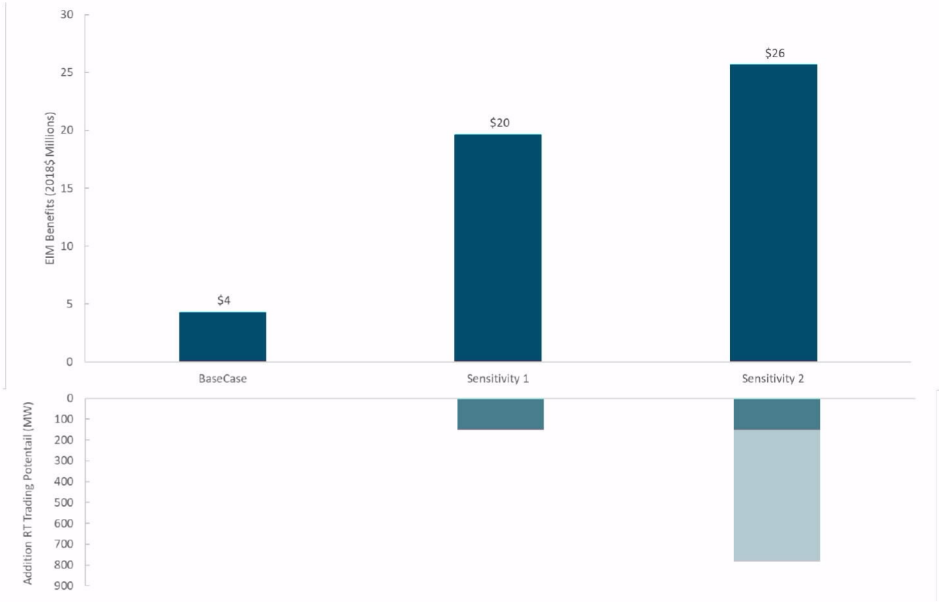
Energy+Environmental Economics

2023 Sensitivity Analysis

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 34 of 53

Sensitivities

- The minimum import of 150MW from PVNGS is released in RT and EPE can sell up to 150MW in addition to the 495MW allowed in DA/HA.
- Sensitivity 2 allows for an additional 633 MW to be sold into the RT Markets which is EPE's full Palo Verde share in addition to the 645MW allowed across Path 47 (Sensitivity 1)



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 35 of 53

Sensitivity 1

- The minimum import of 150MW from PVNGS is released in RT and EPE can sell up to 150MW in addition to the 495MW allowed in DA/HA.

	2023 EIM Base Case		2023 EIM Sensitivity 1	
	Total Generation Cost (2018$MM/year)	Average Cost (2018$/MWh)	Total Generation Cost (2018$MM/year)	Average Cost (2018$/MWh)
DA/HA Purchases	$ 1	$ 14	$ 1	$ 14
RT15 Purchases	$ 3	$ 14	$ 2	$ 9
RT5 Purchases	$ 2	$ 12	$ 4	$ 16
DA/HA Sales	$ (60)	$ (35)	$ (60)	$ (35)
RT15 Sales	$ (2)	$ (34)	$ (27)	$ (45)
RT5 Sales	$ (2)	$ (42)	$ (3)	$ (46)

- $15 Million net increase in EIM benefits compared to the Base Case stems from large amounts of RT15 Sales

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 36 of 53

Sensitivity 1

Average Δ RT15 Sales (Sensitivity 1 - Base Case) in MWh

Month	Hour 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	38	38	34	22	45	41	74	66	21	23	13	13	18	15	22	25	42	53	83	84	76	66	51	27
2	40	15	24	38	42	45	55	44	18	14	16	18	20	17	10	9	31	46	85	73	64	45	23	34
3	45	33	46	52	50	54	51	14	24	27	33	32	30	29	27	20	32	48	71	89	66	71	48	49
4	36	45	37	53	57	58	45	9	10	6	5	8	12	10	9	6	12	40	86	107	100	64	41	44
5	87	74	82	111	134	129	104	49	43	26	19	13	13	20	17	9	32	88	88	64	57	25	38	73
6	87	113	122	100	118	64	58	40	51	52	20	21	31	55	41	25	44	33	75	96	72	127	125	115
7	89	75	66	97	141	88	115	115	106	88	104	106	121	122	127	116	116	98	110	111	100	126	133	95
8	121	135	122	141	127	126	114	77	43	61	67	54	77	97	113	90	96	105	120	107	119	113	130	134
9	47	108	70	141	146	146	52	39	41	25	18	13	36	50	41	63	74	97	118	73	76	107	95	82
10	60	52	51	50	49	86	60	36	18	8	6	11	9	13	46	79	99	79	108	98	83	80	56	47
11	59	54	63	74	85	83	77	66	77	60	58	76	81	73	83	88	84	83	77	68	53	63	62	67
12	49	49	54	59	63	70	60	69	69	70	77	62	63	57	51	60	51	69	73	62	69	60	61	55

Average RT15 Market Price (2018$/MWh)

Month	Hour 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	30	30	31	25	32	33	40	74	23	22	19	11	10	10	17	17	32	46	40	40	33	37	37	28
2	53	23	23	29	29	36	55	41	21	17	14	10	6	2	7	9	28	64	73	69	51	31	30	29
3	19	18	21	25	39	38	28	20	8	6	6	3	3	2	5	9	22	56	91	47	32	33	34	18
4	25	24	23	25	57	40	25	6	2	-2	-2	-6	4	10	23	29	43	73	105	63	48	32	30	60
5	19	17	17	21	25	24	19	5	8	7	8	9	11	20	14	12	16	34	27	20	22	15	17	19
6	21	22	22	15	23	19	15	18	19	18	16	17	17	36	28	21	23	29	44	40	26	27	25	44
7	58	32	25	27	39	27	34	31	31	31	47	42	59	67	71	58	78	83	94	52	42	49	39	93
8	48	30	28	31	32	33	51	24	25	28	28	30	44	53	70	67	114	116	159	81	56	45	43	61
9	21	25	22	30	38	36	19	17	18	16	16	16	19	23	21	30	36	62	70	26	27	27	26	27
10	44	27	30	28	39	41	36	31	13	1	6	15	11	10	18	28	73	89	75	40	39	29	30	37
11	44	32	41	42	49	59	59	57	30	21	14	16	16	10	21	51	91	68	46	35	34	36	37	41
12	38	36	37	39	40	44	60	43	38	33	29	25	26	23	27	36	49	48	38	32	40	37	37	43

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 37 of 53

Base Case vs Sensitivity 1

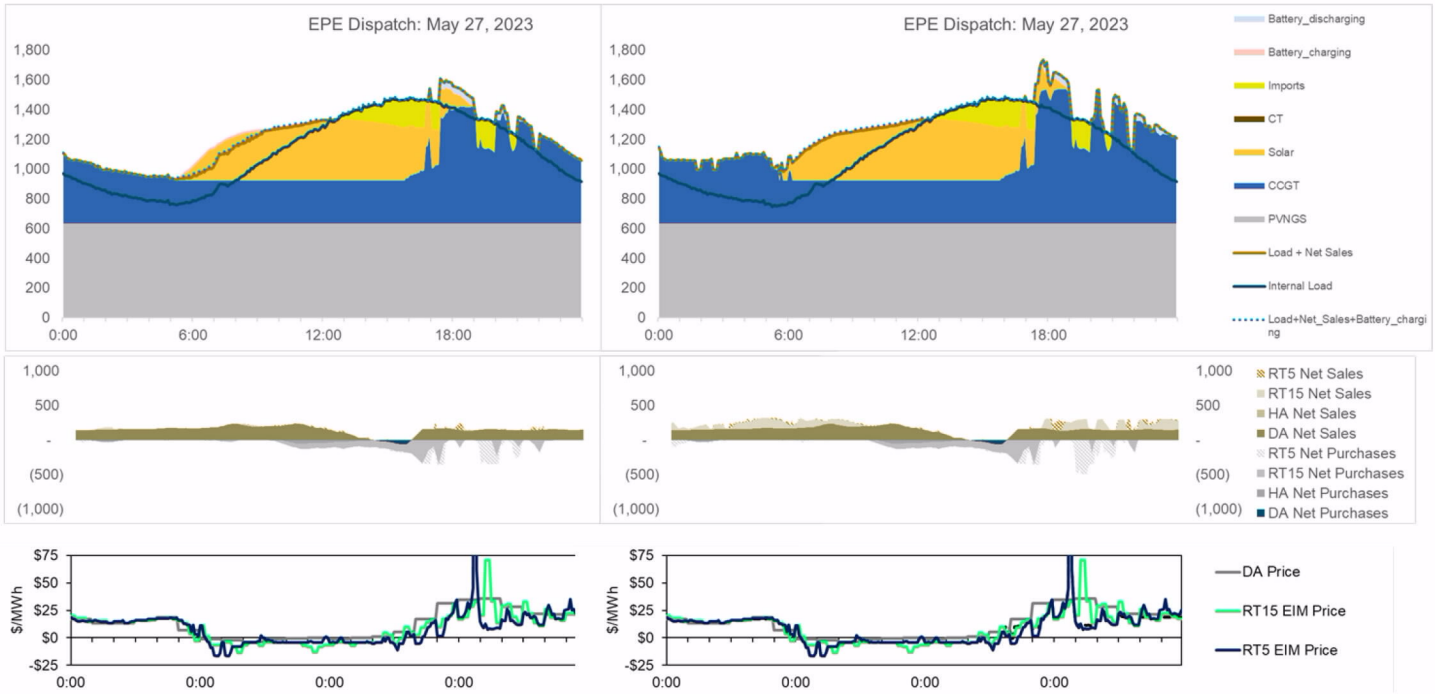
	2023 Base Case EIM	2023 Sensitivity 1 EIM
Resource	Capacity Factors (%)	Capacity Factors (%)
PVNGS	100%	100%
Montana Power Station 1	36%	37%
Montana Power Station 2	63%	64%
Montana Power Station 3	22%	22%
Montana Power Station 4	50%	51%
Newman 1	0%	0%
Newman 2	0%	0%
Newman 3	13%	18%
Newman 4 ST	31%	35%
Newman 5 ST	89%	91%
Newman 6	9%	11%
Rio Grande 6	0%	0%
Rio Grande 7	0%	0%
Rio Grande 8	15%	23%
Rio Grande 9	1%	1%
BTM Solar	23%	23%
Solar + Battery	28%	28%
Solar	28%	28%
Copper 1	0%	5%
Newman GT1	22%	25%
Newman GT2	21%	22%
Newman GT3	63%	76%
Newman GT4	63%	80%
EPE Battery	1%	0%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 38 of 53

Base Case vs Sensitivity 1

Base Case EIM

Sensitivity 1 EIM



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 39 of 53

Sensitivity 2

- Sensitivity 2 allows for an additional 633 MW to be sold into the RT Markets which is EPE's full Palo Verde share in addition to the 645MW allowed across Path 47 (Sensitivity 1)
- Sensitivity 2 EIM benefits, $26 Million -- are higher than Sensitivity 1 EIM benefits ($20 Million) – but are constrained by unit commitment window.

	2023 EIM Sensitivity 1		2023 EIM Sensitivity 2	
	Total Generation Cost (2018$MM/year)	Average Cost (2018$/MWh)	Total Generation Cost (2018$MM/year)	Average Cost (2018$/MWh)
DA/HA Purchases	$ 1	$ 14	$ 1	$ 14
RT15 Purchases	$ 2	$ 9	$ 2	$ 9
RT5 Purchases	$ 4	$ 16	$ 5	$ 18
DA/HA Sales	$ (60)	$ (35)	$ (60)	$ (35)
RT15 Sales	$ (27)	$ (45)	$ (38)	$ (47)
RT5 Sales	$ (3)	$ (46)	$ (4)	$ (49)

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 40 of 53

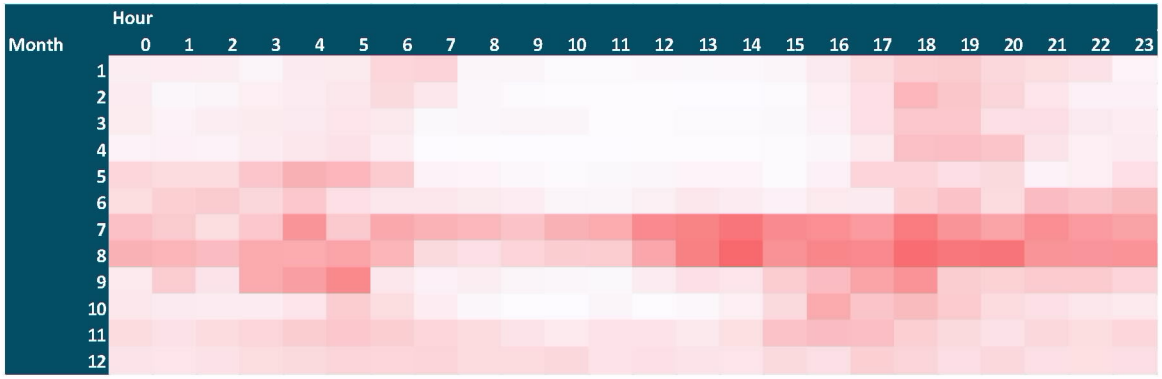
Sensitivity 1 vs Sensitivity 2

	2023 Sensitivity 1 EIM	2023 Sensitivity 2 EIM
Resource	Capacity Factors (%)	Capacity Factors (%)
PVNGS	100%	100%
Montana Power Station 1	37%	37%
Montana Power Station 2	64%	65%
Montana Power Station 3	22%	22%
Montana Power Station 4	51%	51%
Newman 1	0%	0%
Newman 2	0%	0%
Newman 3	18%	25%
Newman 4 ST	35%	35%
Newman 5 ST	91%	92%
Newman 6	11%	12%
Rio Grande 6	0%	0%
Rio Grande 7	0%	0%
Rio Grande 8	23%	26%
Rio Grande 9	1%	1%
BTM Solar	23%	23%
Solar + Battery	28%	28%
Solar	28%	28%
Copper 1	5%	8%
Newman GT1	25%	27%
Newman GT2	22%	26%
Newman GT3	76%	77%
Newman GT4	80%	81%
EPE Battery	0%	1%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 41 of 53

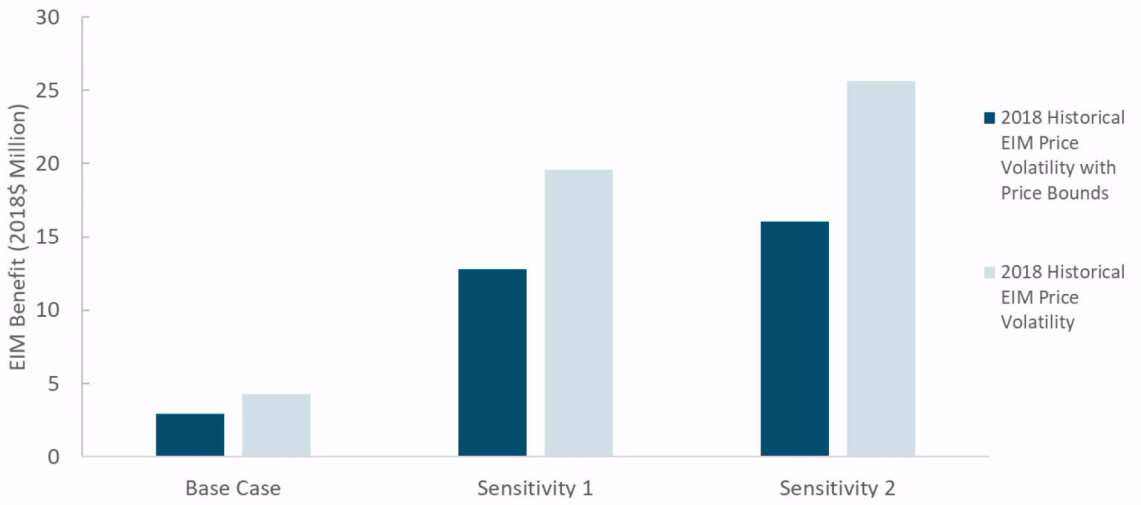
Sensitivity 2 and Base Case Comparison

+ Average Δ RT15 Sales Revenue (Sensitivity 2 – Base Case)



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 42 of 53

EIM Price Volatility Sensitivity (2023 case)

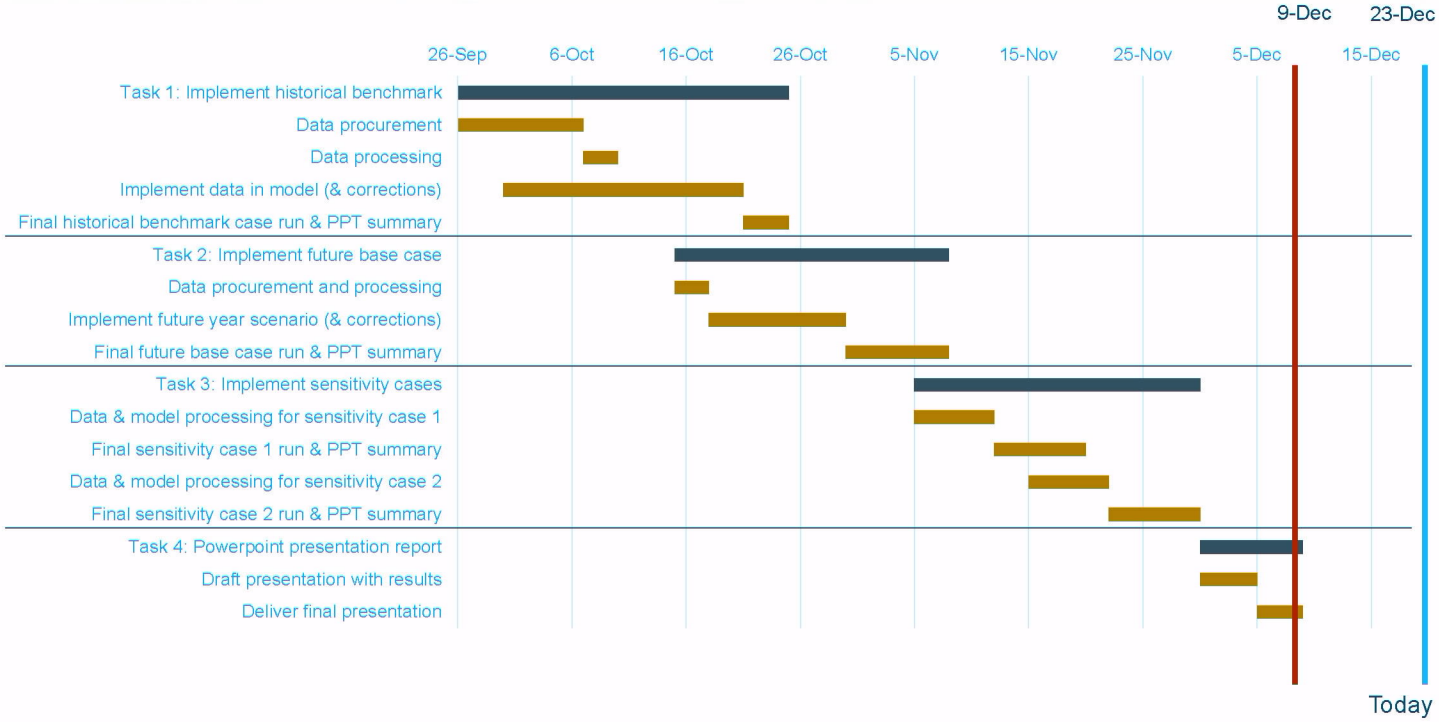


	Base Case EIM Benefits (2018$ Million)	Sensitivity 1 EIM Benefits (2018$ Million)	Sensitivity 2 EIM Benefits (2018$ Million)
2018 Historical EIM Price Volatility	4	20	26
2018 Historical EIM Price Volatility with Price Bounds	3	13	16

+ These are conservative estimates as DA/HA block sales/purchases are not modeled in this study.

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 43 of 53

Project timeline



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 44 of 53

Energy+Environmental Economics

Appendix

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 45 of 53

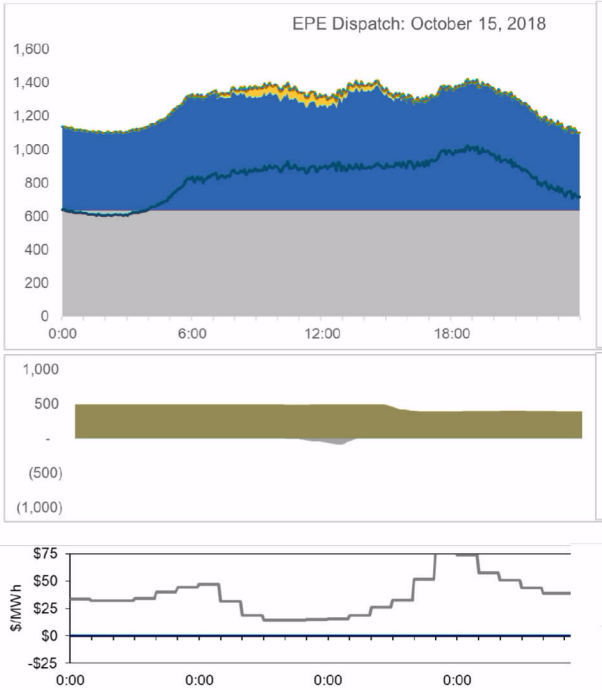
Energy+Environmental Economics

2018 Historical Benchmark Case Analysis

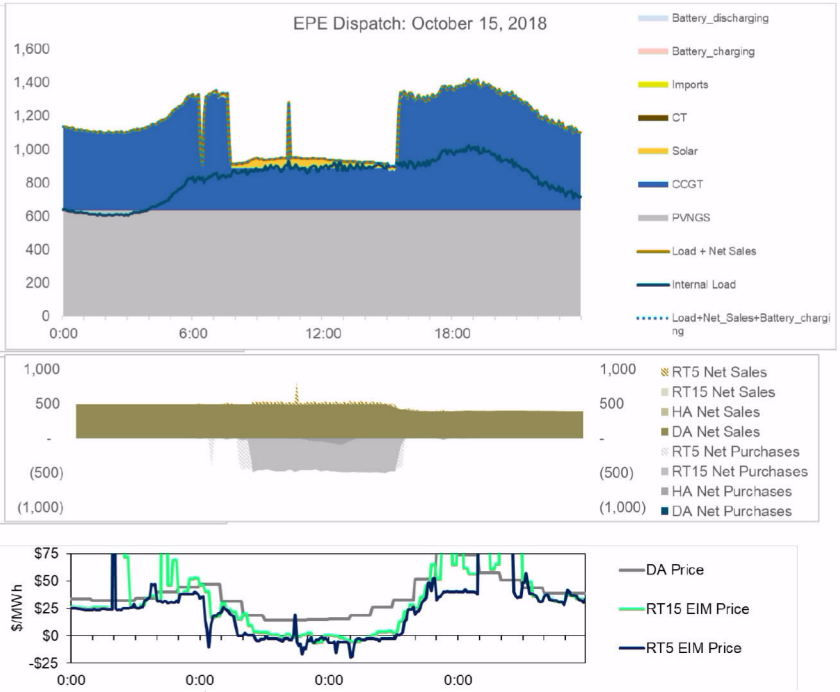
SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 46 of 53

2018 dispatch day (October 15)

No EIM



EIM

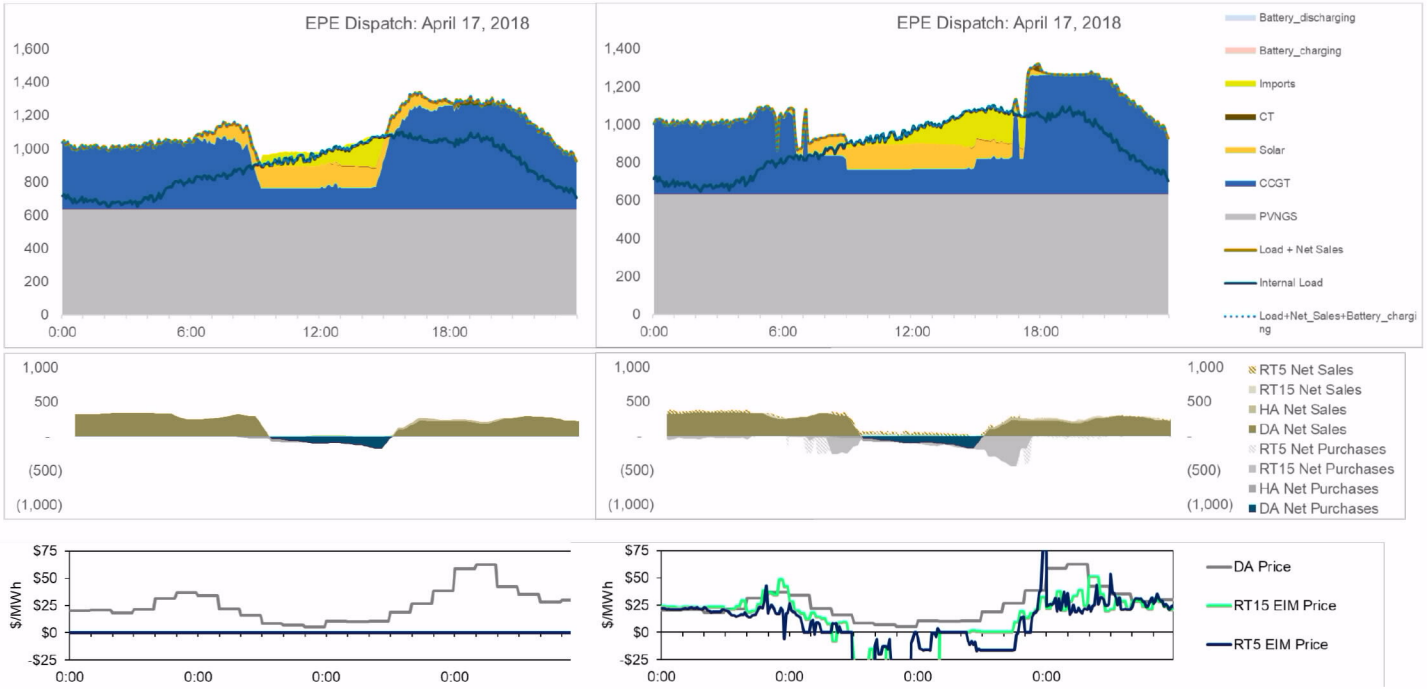


SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 47 of 53

2018 dispatch day (April 17)

No EIM

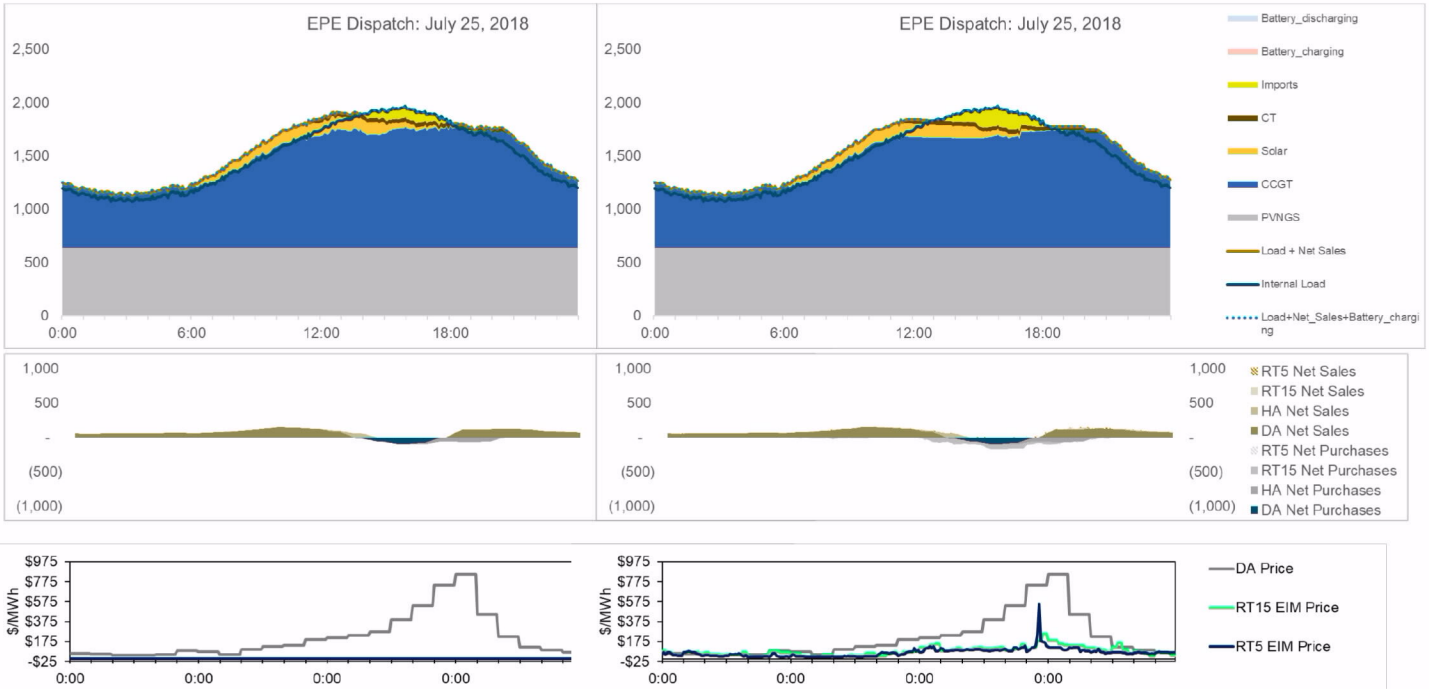
EIM



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 48 of 53

2018 dispatch day (peak)

No EIM | EIM



SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 49 of 53

2018 Capacity Factor changes due to EIM

Resource	2018 No EIM Capacity Factors (%)	2018 EIM Capacity Factors (%)	EIM - No EIM
PVNGS	100%	100%	0%
Montana Power Station 1	44%	43%	-2%
Montana Power Station 2	48%	46%	-2%
Montana Power Station 3	61%	58%	-2%
Montana Power Station 4	63%	61%	-2%
Newman 1	3%	3%	0%
Newman 2	3%	3%	0%
Newman 3	27%	27%	1%
Newman 4 ST	64%	64%	0%
Newman 5 ST	39%	39%	0%
Rio Grande 6	2%	2%	0%
Rio Grande 7	4%	4%	0%
Rio Grande 8	29%	29%	0%
Rio Grande 9	11%	9%	-1%
BTM Solar	23%	23%	0%
Solar	28%	28%	0%
Copper 1	3%	1%	-2%
Newman GT1	33%	34%	0%
Newman GT2	42%	43%	0%
Newman GT3	32%	30%	-2%
Newman GT4	38%	35%	-3%
EPE Battery	0%	0%	0%

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 50 of 53

2018 Cost Comparison

Resource	No EIM Total Generation Cost (2018$MM/year)	EIM Total Generation Cost (2018$MM/year)
PVNGS	$ 44	$ 44
Montana Power Station 1	$ 6	$ 6
Montana Power Station 2	$ 6	$ 6
Montana Power Station 3	$ 8	$ 8
Montana Power Station 4	$ 8	$ 8
Newman 1	$ 1	$ 0
Newman 2	$ 0	$ 0
Newman 3	$ 5	$ 5
Newman 4 ST	$ 18	$ 18
Newman 5 ST	$ 11	$ 11
Rio Grande 6	$ 0	$ 0
Rio Grande 7	$ 0	$ 0
Rio Grande 8	$ 8	$ 8
Rio Grande 9	$ 2	$ 2
BTM Solar	$ -	$ -
Solar	$ -	$ -
Copper 1	$ 1	$ 1
Newman GT1	$ 7	$ 7
Newman GT2	$ 9	$ 9
Newman GT3	$ 5	$ 4
Newman GT4	$ 6	$ 5
EPE Battery	$ -	$ -
DA/HA Purchases	$ 3	$ 3
RT15 Purchases	$ -	$ 3
RT5 Purchases	$ -	$ 1
DA/HA Sales	$ (58)	$ (58)
RT15 Sales	$ -	$ (2)
RT5 Sales	$ -	$ (2)
Total generation cost	**90**	**87**

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 51 of 53

2018 Historical Benchmark EIM Benefits

- **Annual EIM Benefits: $3.38 Million**
- **If market prices are bound [-$30/MWh, $100/MWh]**
  - Annual EIM Benefits are $2.1 Million
- **Factors that can affect EIM benefits:**

Potential to increase EIM benefits	Potential to decrease EIM benefits
Flexibility of Palo Verde share generation	Implement bounds on RT prices
Limit DA sales and purchases to on-peak and off-peak blocks	Access to HA prices that are in between DA and RT EIM prices
Higher import transmission limits	

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 52 of 53

Historical vs. 2023 No EIM Comparison

- **Mixed changes in capacity factor**
  - Newman [5, GT3, GT4]
    - 2018: Must run in the summer
    - 2023: Must run over the whole year
  - Newman 3, Newman [4, GT1, GT2], and Rio Grande 8
    - 2018: Must run over the whole year
    - 2023: Must run in the summer
  - Newman 6
    - New generator
  - Retirement: Newman 1, Newman 2, Rio Grande 6, Rio Grande 7
  - Increase in Solar generation and changes in heat rates in Montana Power Stations
- **Increase total generation costs**
  - Increase in gas prices from 2018 to 2023

SOAH Docket No. 473-21-2606
PUC Docket No. 52195
CEP's 6th, Q. No. 6-17
Attachment 1
Page 53 of 53

VOLUMINOUS

CEP 6-17 Attachment 2 is a VOLUMINOUS attachment.

EIM - Reconciliation of Utilicast Study Implementation Costs and Final Estimates

Line		2021	2022	2023	Total
1	Utilicast Study Implementation Costs				
2	Capital	$1,690,000	$4,530,000	$860,000	$7,080,000
3	O&M	$3,130,000	$4,040,000	$410,000	$7,580,000
4	Subtotal cost	$4,820,000	$8,570,000	$1,270,000	$14,660,000
5	15% Capital Contingency (A)	$250,000	$680,000	$130,000	$1,060,000
6	15% O&M Contingency (A)	$470,000	$610,000	$60,000	$1,140,000
7	Total Cost	$5,540,000	$9,860,000	$1,460,000	$16,860,000
8	Changes in Cost Esitmates				
9	Capital (B)	$0	$140,000	$0	$140,000
10	O&M (C)	$0	$328,704	$328,704	$657,408
11	Subtotal cost	$0	$468,704	$328,704	$797,408
12	15% Capital Contingency (A)	$0	$20,000	$0	$20,000
13	15% O&M Contingency (A)	$0	$50,000	$50,000	$100,000
14	Total Cost	$0	$538,704	$378,704	$917,408
15	Revised Estimates before ASU 2018-15				
16	Capital	$1,690,000	$4,670,000	$860,000	$7,220,000
17	O&M	$3,130,000	$4,368,704	$738,704	$8,237,408
18	Subtotal cost	$4,820,000	$9,038,704	$1,598,704	$15,457,408
19	15% Capital Contingency (A)	$250,000	$700,000	$130,000	$1,080,000
20	15% O&M Contingency (A)	$470,000	$660,000	$110,000	$1,240,000
21	Total Cost	$5,540,000	$10,398,704	$1,838,704	$17,777,408
22	Final Estimates after ASU 2018-15				
23	Capital	$2,675,225	$7,126,339	$935,625	$10,737,190
24	O&M	$2,141,959	$1,397,024	$338,527	$3,877,511
25	Subtotal cost	$4,817,185	$8,523,363	$1,274,153	$14,614,701
26	Capital Contingency (D)	$584,431	$1,206,707	$422,758	$2,213,895
26	O&M Contingency (D)	$250,470	$517,160	$181,182	$948,812
27	Total Cost	$5,652,086	$10,247,230	$1,878,092	$17,777,408

28 (A) Amounts rounded to the nearest $5 thousand
29 (B) Costs related to office space build out/ cubicles
30 (C) Early new hires to support EIM implementation projects for Marketing/Settlements, System Operations, and Information Technology/Energy Management System
31
(D) The Changes in Cost Estimates were incuded as Contingency in the Final Estimates after ASU 2018-15

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-18:

Reference page 9 of EPE witness Hawkins' direct testimony, please discuss any additional costs, such as market fees, transmission costs, or ancillary service costs, that are expected to be incurred by EPE because of the Company's planned participation in the EIM in April 2023.

RESPONSE:

Please refer to CEP 6-17, Attachment 2, for all identified implementation and ongoing costs to be incurred by El Paso Electric Company ("Company") because of the Company's planned participation in the EIM in April 2023.

Preparer: Jesus Gonzalez Title: Manager – Day Ahead & Long-Term Trading

Sponsor: David C. Hawkins Title: Vice President – Strategy & Sustainability

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-19:

Reference page 19 of EPE witness Hawkins' direct testimony, please provide documentation of the referenced Palo Verde overall budget package provided to EPE along with the Company's analysis and conclusions supporting approval of the overall budget for the Test Year period.

RESPONSE:

Please refer to CEP 6-19, Attachment 1 CONFIDENTIAL for the Palo Verde overall budget package and CEP 6-19, Attachment 2 CONFIDENTIAL for the Company's analysis provided to Management and recommendation of the 2020 budget package.

The Palo Verde budget package consists of a two-year detailed and one year forecast summary Operations & Maintenance, as well as a five-year detailed and five-year forecast summary Capital budget. The El Paso Electric budget analysis process includes a review of the detailed budgets and forward-looking macro influences that could have an impact on budgets. The potential budget influences are not meant to be comprehensive, but an observation of the challenges facing the nuclear industry and potential participant regulatory constraints that may have influence on PV budget strategy.

Preparer:	Victor Martinez	Title:	Manager – Resource Planning, Resource Management Regulatory & Quality Assurance
Sponsor:	David C. Hawkins Todd Horton	Title:	Vice President – Strategy & Sustainability Senior Vice President –Site Operations (Palo Verde Generation Station)

PUBLIC

CEP 6-19 Attachment 1 is a CONFIDENTIAL and/or HIGHLY SENSITIVE PROTECTED MATERIALS and VOLUMINOUS attachment.

PUBLIC

CEP 6-19 Attachment 2 is a CONFIDENTIAL and/or HIGHLY SENSITIVE PROTECTED MATERIALS attachment.

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-20:

Please provide EPE's share of administrative and general and other overhead charges and management fees charged by APS for operations of the Palo Verde plant for the last four calendar years and the Test Year, along with any analysis conducted by the Company to determine the reasonableness of such charges.

RESPONSE:

Please refer to CEP 6-20, Attachment 1 for EPE's share of administrative and general fees charged by APS for operations of the Palo Verde plant for the last four calendar years and the Test Year.

Please refer to CEP 6-20, Attachment 2 for EPE's share of overhead and distributable costs. The direct testimony of Todd Horton, pages 25 – 28, explains the reasonableness and necessity of the overhead and distributable costs. Please refer to CEP 1-21, Attachment 1 Confidential Appendix E of the Palo Verde Participation Agreement that outlines participant responsibilities for O&M costs and allocation methodology for overhead expenses. As a participant in Palo Verde Generating station, EPE has representation on the audit committee. The audit committee has the responsibilities outlined in section 6.4 of the Participation Agreement. As part of the annual audit, charges are closely reviewed for appropriateness, allocation methodology and accounting practice.

Preparer:	Victor Martinez	Title:	Manager – Resource Planning, Resource Management Regulatory & Quality Assurance
	En Li		Manager – Financial Accounting
Sponsor:	David C. Hawkins	Title:	Vice President – Strategy & Sustainability
	Cynthia S. Prieto		Vice President – Controller
	Todd A. Horton		Senior Vice President – Site Operations (Palo Verde Generating Station)

Table below represents EPE's share of administrative and general charged by APS for operations of Palo Verde plant for the last four calendar years and the Test Year

Line No	FERC Acct	(a) Description	(b) 2016	(b) 2017	(c) 2018	(d) 2019	(e) 2020 (A)
		Administrative & General Expense					
		Operation					
1	924000	Property Insurance	$ 776,001	$ 710,785	$ 332,406	$ 728,609	$ -
2	925000	Injuries & Damages	549,699	677,892	454,241	651,709	-
3	926000	Employee Pensions & Benefits	5,117,681	6,536,717	4,697,221	6,095,821	-
4	928000	Regulatory Commission Expenses	2,836,270	2,436,672	2,599,920	2,804,675	-
5	930200	Miscellaneous General Expenses	10,648,311	12,090,898	11,639,556	12,136,404	-
6		Total Administrative & General Expense	$ 19,927,962	$ 22,452,964	$ 19,723,344	$ 22,417,218	$ -
7	524000	Miscellaneous Nuclear Power Expenses					$ 21,067,833

(A) As explained in the direct testimony of Cynthia S Prieto, in compliance with the FERC audit report in Docket No PA19-3-000, in December 2020, the Company reclassified portions of the billings from Arizona Public Service Company recorded as administrative and general expenses (A&G) into Account 524000, Miscellaneous Nuclear Power Expenses for the operation and maintenance (O&M) of the Palo Verde Generation Station This reclassification represents a shift from A&G into O&M accounts not an increase in costs incurred during the test year ended December 31, 2020

SOAH Docket No 473-21-2606
PUC Docket No 52195
CEP's 6th, Q No CEP 6-20
Attachment 1
Page 1 of 1

($000)

	2016	2017	2018	2019	2020	Grand Total
PLANT MODIFICATIONS	847.98	1,040.20	741.42	893.66	1,063.43	4,586.69
PLANT EQUIPMENT & REPLACEMENTS	406.30	2,807.13	1,428.88	1,978.16	1,368.96	7,989.43
BUILDINGS	6.34	48.93	20.50	19.46	60.32	155.55
GENERAL PLANT	74.44	9.70	49.26	26.78	7.08	167.27
INFORMATION TECHNOLOGY	13.47	21.68	11.71	31.67	57.31	135.84
WATER RECLAMATION FACILITY	19.73	59.01	130.66	99.14	230.11	538.65
MAJOR STRATEGIC PROJECTS	176.31					176.31
Grand Total	1,544.58	3,986.65	2,382.43	3,048.88	2,787.21	13,749.75

SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES	§ § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

EL PASO ELECTRIC COMPANY'S RESPONSE TO
CITY OF EL PASO'S SIXTH REQUEST FOR INFORMATION
QUESTION NOS. CEP 6-1 THROUGH CEP 6-21

CEP 6-21:

Reference page 23 of EPE witness Hawkins' direct testimony, please provide the referenced Palo Verde O&M budget variance reports for each month of the Test Year period.

RESPONSE:

Please refer to CEP 6-21, Attachment 1, for the Palo Verde O&M budget variance reports for each month of the Test Year period.

Preparer:	Victor Martinez	Title:	Manager – Resource Planning, Resource Management Regulatory & Quality Assurance
Sponsor:	David C. Hawkins Todd A. Horton	Title:	Vice President – Strategy & Sustainability Senior Vice President –Site Operations (Palo Verde Generating Station)